

Alaska Department of Natural Resources

Division of Forestry

2003

Annual Report

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Alaska Division of Forestry

The Alaska Department of Natural Resources
Division of Forestry:

- Manages a wildland fire program on public, private, and municipal land;
- Encourages development of the timber industry and forest products markets;
- Conducts timber sales for commercial use, personal use, and fuelwood;
- Protects water quality, fish and wildlife habitat, and other forest values through appropriate forest practices and administration of the Forest Resources and Practices Act;

- Manages the Haines and Tanana Valley state forests, which cover a total of 2.6 million acres;
- Administers Community Forestry, Conservation Education, Forest Health, and Forest Stewardship programs;
- Gives technical assistance to owners and managers of forested land.

The State Forester's Office is located in Anchorage. In addition, the division has two regional offices and nine area offices responsible for program support and field work.

In 2003, the division had 73 permanent full-time, 192 permanent part-time and seasonal, and 12 non-permanent employees.

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State Forester's Message

Reflecting on the Division of Forestry's accomplishments during 2003 results in a sense of pride, a renewed hope that the forest industry will be able to reshape itself and grow, and a deepening respect for Alaskans who value and appreciate their great forest resource.

The past year has brought new initiatives to natural resource development that may benefit Alaska's forest based users. An interior timber initiative is identifying the available state and private timber in the Tanana Valley. This region of the state represents large tracts of mostly unused state and private forestland. Responsible development of this forest may be achievable if a sustainable timber industry is identified. Jobs and long-term economic benefit can result from well conceived, renewable forest development. In addition to the interior initiative, interest in hardwood and softwood chips in Port Mackenzie and Valdez, wood processing and milling proposals in Seward, a veneer mill in Ketchikan and the expansion of several smaller local processors all provide reason for guarded optimism about the future of the forest products industry in Alaska.

Population growth into the forested urban interface areas continues to expand, particularly along the road and rail network. In addition, this year saw the ending of a market for forest products in vast areas of spruce bark beetle infestation, making fuel hazard reduction in these areas all the more difficult to accomplish. These issues ensure that the division's fire preparedness and suppression programs will continue to be challenged in future years.

The Division of Forestry is the field representative for several federal private forestland assistance programs such as urban and community forestry, stewardship, forest land enhancement, forest health, and conservation education. While these are relatively small programs, they represent a significant opportunity for Alaskans to better understand and be better prepared to manage Alaska's forested lands. Difficult decisions regarding future federal budget appropriations in Washington could result in real challenges in keeping these programs active and successful in Alaska.



State Forester Jeff Jahnke (photo by Adonna Crouse)

And finally, I am proud of the Division of Forestry. To each and every division employee who takes pride in their work, who works extra hours because they care, who aren't recognized often enough, who go the extra mile to get the job done – THANK YOU. To the rest of you reading this annual report, I hope you are as impressed as I am at the breadth and depth of the accomplishments of the Division of Forestry in 2003.

Jeff J. Jahnke



Lake on Afognak Island (photo by Wade Wahrenbrock)

2003 at a Glance

Resource Management

- The Division of Forestry offered 105 commercial timber sales in Fiscal Year 2003. Of these, 68 sold for a volume of 18,737 MBF.
- State timber sales contributed \$475,900 to the state treasury in Fiscal Year 2003.
- The division issued 331 personal-use permits.
- The division planted 229,100 seedlings on 540 acres of state land and scarified 229 acres in preparation for planting.
- DOF registered 42 log brands, of which 10 were new and 32 were renewals.
- The division processed 112 forest practices notifications of timber harvest and 56 renewals of harvest on 35,140 acres.
- Forestry staff conducted 125 forest practices field inspections.
- The division, in cooperation with the U.S. Forest Service, mapped forest insect and disease activity on 32 million acres through aerial surveys.
- The Board of Forestry held three meetings around the state, discussing the Forest Resources & Practices Act with the public, and working with the administration and the legislature on forestry legislation.
- The Community Forestry Program held a seminar on insects and diseases of urban trees and forests, attended by 108 people. Sixteen volunteers completed the 30-hour Community Tree Steward Course in Anchorage.
- Juneau and Sitka joined five other Alaska communities in being recognized as Tree Cities, USA.
- The Forest Stewardship Program helped 31 private forest landowners prepare stewardship plans for 1,621 acres.
- Two Native corporations completed forest stewardship plans for a total of 78,274 acres.
- Private landowners used funds from a federal cost-share program administered by the division to plant 182,560 seedlings on 388 acres.
- The DOF Conservation Education Program trained more than 200 educators, university students, and Scout leaders. Eight Project Learning Tree workshops and three online courses brought together teachers from around the state. Over 100 teachers participated in the Fire in Alaska training.
- Promoted timber development opportunities through the Interior Forest Initiative.

Fire Management

- In cooperation with federal agencies, the division provided fire protection for 150 million acres of private, municipal, and state land.
- A total of 476 wildfires burned 602,718 acres in Alaska during the 2003 fire season.
- The Alaska Type 1 Team spent 44 days assigned to large fires in the Lower 48.
- The division administered federal Volunteer Fire Assistance Grants totaling \$157,714. These funds allowed volunteer fire departments in 37 communities to train fire fighters and purchase tools, equipment, and supplies.
- Emergency firefighters collected \$8.6 million in state and federal wages.
- The State Fire Warehouse provided \$5.2 worth of fire fighting supplies and equipment in Alaska and British Columbia, and materials valued at \$3.2 million to Lower 48 efforts.
- Legislation was enacted for discretionary immunity for firefighting decisions and actions.
- Federal Fire Plan funding established 42 new initial attack firefighting, dispatch, and warehouse positions statewide.
- The 1996 Miller's Reach Fire lawsuit was unanimously resolved by a superior court jury in the state's favor.

Alaska State Forests

About two percent of state land in Alaska is in two designated state forests. In 1982, the Alaska Legislature established the 286,208-acre Haines State Forest in southeast Alaska. The following year the legislature created the 1.78 million-acre Tanana Valley State Forest in the Interior.

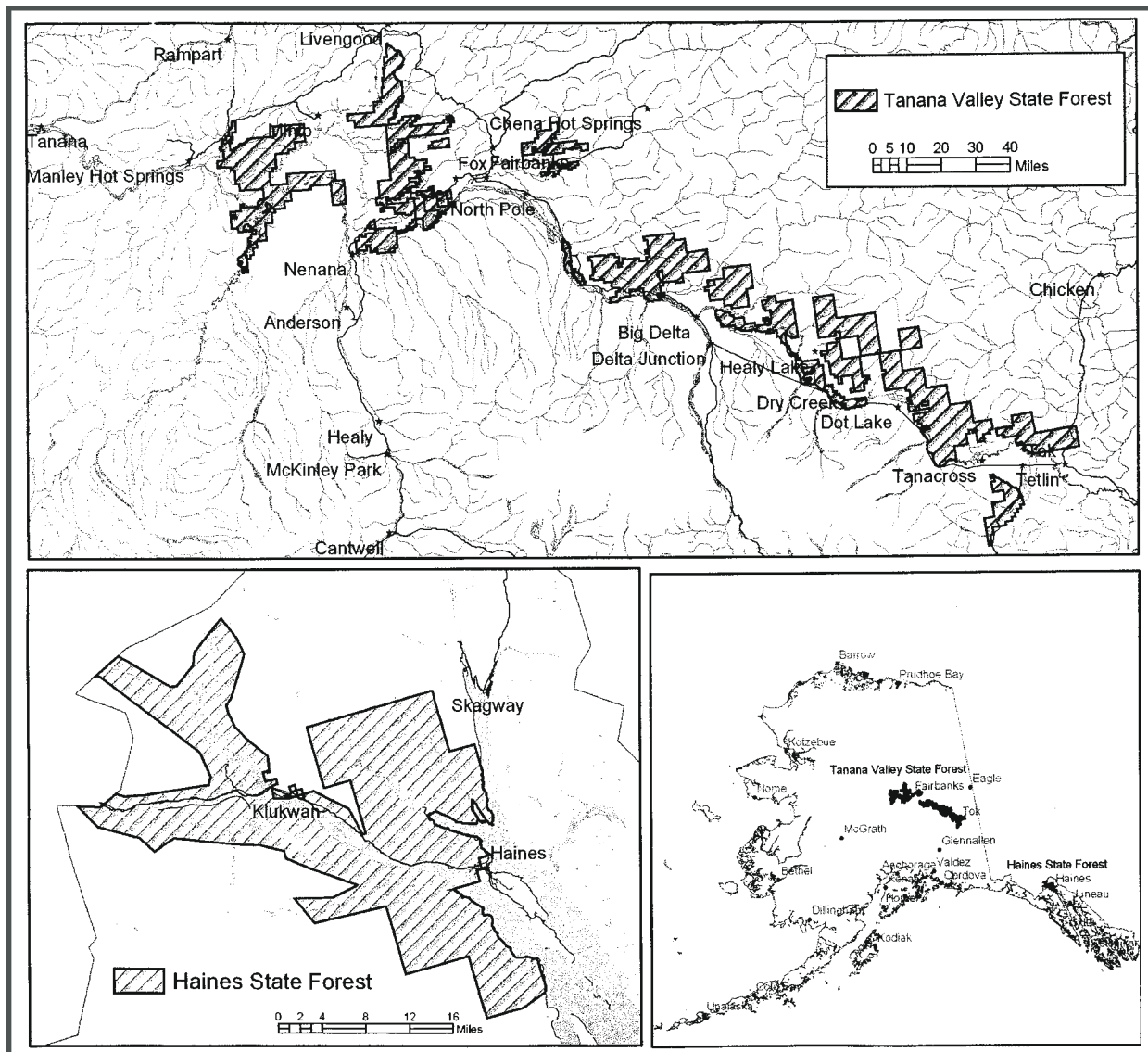
In addition to the two designated state forests, much of the state's public domain land is available for multiple use, including forest management.

DNR manages the state forests for a sustained yield of many resources. The primary purpose is the production, use, and replenishment of timber while perpetuating personal, commercial, and other beneficial uses of resources through multiple use management. State forests provide fish and wildlife habitat, clean water, minerals, and opportunities for recreation and tourism. The main difference between state forests and other areas set aside by the legislature is that state forests provide timber harvesting for commercial and personal use

(AS 41.17.200) while allowing other beneficial uses in the forest.

A DNR management plan guides the use of each state forest. Plan guidelines determine how to manage different uses to complement each other.

The state adopted a revised plan for the Haines State Forest in September 2002. The Tanana Valley State Forest Plan was revised in 2001 and an amendment for Unit 2 was adopted in 2003.



Tanana Valley State Forest

The Tanana Valley State Forest's 1.78 million acres lie almost entirely within the Tanana River Basin, located in the east-central part of Alaska. The forest extends 265 miles, from near the Canadian border to Manley Hot Springs. It varies in elevation from 275 feet along the Tanana River to over 5,000 feet in the Alaska Range. The Tanana River flows for 200 miles through the forest.

Almost 90 percent of the state forest (1.59 million acres) is forested, mostly with birch, quaking aspen, balsam poplar, black spruce, white spruce, and tamarack. Half of the Tanana basin's productive forestland (1.1 million acres) is located in the state forest. About 85 percent of the forest is within 20 miles of a state highway. Seventy thousand people live in 18 communities adjacent to the forest.

The Tanana Valley State Forest offers many recreational opportunities including hunting, fishing, trapping, camping, hiking, dog mushing, cross-country skiing, wildlife viewing, snow machining, gold panning, boating, and berry-picking.

The forest is open to mining, gravel extraction, oil and gas leasing, grazing, and other uses but timber production is the major commercial activity. The Bonanza Creek Experimental Forest is a 12,400-acre area dedicated to forestry research within the state forest.

Forest Activity in 2003

In 2002, DNR issued a seven-year oil and gas exploration license to Andex Resources, LLC to explore 483,000 acres west of the Parks Highway between Anderson and Minto. The license area includes the eastern portion of Unit 2 near Old Minto and other state lands. There was no exploration activity in 2003.

Teck-Pogo, Inc. has applied for authorizations to develop the Pogo Gold Mine, which is on state land in the Goodpaster River Valley 38 miles northeast of Delta Junction. The company studied road access alternatives and chose the Shaw Creek hillside all-season route in 2003. Access road and powerline construction will begin in 2004. The road will cross a portion of the state forest in Unit 8.

A 12-member citizen's advisory committee, representing a variety of state forest users, actively participates in forest planning in the Tanana Basin. The committee makes recommendations on management of the forest and assists with revision of the forest plan. Members are listed on page 46.

The TVSF plan was revised in 2001. However, several issues related to the Lower Tanana Unit 2, a remote 160,000-acre block about 45 miles west of Fairbanks, required more detailed planning.

The division conducted substantial public outreach during the summer of 2002, prior to hosting planning team meetings to address these issues. Team members agreed on general guidelines and drafted a management plan amendment. Public hearings were held in Minto, Manley Hot Springs, Nenana, and Fairbanks in March 2003. The plan amendment was officially adopted in June 2003.

Haines State Forest

The Haines State Forest contains 286,208 acres, including the watersheds of some of the major tributaries to the Chilkat River. Located in a transition zone between the moderate, wet coastal climate and the dry, cold interior, the forest provides suitable conditions for a diversity of vegetation. The rugged topography ranges from sea level to 7,000 feet.

The forest is composed mostly of two forest types – western hemlock/Sitka spruce, and black cottonwood/willow. Lodgepole pine and paper birch occur as minor species throughout the forest. About 15 percent of the state forest (41,652 acres) is dedicated to timber

harvest, which has occurred in the forest since the 1960s. The annual allowable harvest is 5.88 million board feet. Although natural regeneration occurs readily, all large commercial sales have been replanted since the 1970s to accelerate reforestation.

Prospectors and miners have worked in this mineral-rich area since the turn of the century and continue operating today. Backcountry logging roads, rivers, and hiking trails provide access to remote areas and abundant recreational opportunities. Hiking, hunting, fishing, camping, berry-picking, snow machining, and skiing are popular activities. Several commercial operators provide tours in the forest.

Both photographers and hunters pursue the forest's moose, black and brown bears, and mountain goats. Wolves, marten, lynx, wolverine, porcupine, beaver, river otter, and many other small mammals live in the forest. Trumpeter swans, geese, ducks, and a variety of song birds are also present.

The forest surrounds the 45,000-acre Chilkat Bald Eagle Preserve, which is managed by the Alaska Division of Parks and Outdoor Recreation.

The state adopted a revised plan for the Haines State Forest in September 2002.

Forest Resources & Practices

The Division of Forestry administers the Forest Resources and Practices Act (FRPA) on private, municipal, trust, and state lands. The division reviews notifications of timber harvests, conducts forest inspections, monitors compliance and, when necessary, takes enforcement action. An important aspect of the program is informing landowners, harvest operators, and the public about requirements of the Act and responsible forest practices.

The forest practices notification and review process does not require a permit before an activity begins. Rather, timber operators submit a Detailed Plan of Operations (DPO) to the Division of Forestry for review. The division then coordinates review of the plan with the DNR Office of Habitat Management & Permitting and the Department of Environmental Conservation. When the review is complete, the operator may begin harvest operations. Timber

operators usually submit notifications well in advance of beginning operations, and reviews are completed within 30 days.

At times, areas for which notifications have been submitted are not harvested within the one-year notification period. These areas require a renewal notice the following year before operations begin.

2003 Highlights

The FRPA continues to be effective in protecting water quality and fish habitat, while supporting the timber and fishing industries. After 125 field inspections this year, the division issued only three directives and no notices of violation. No waters are listed as impaired under the Clean Water Act as a result of forestry activities governed by the FRPA. These, along with initial results from compliance monitoring, are indicators that the Act is being implemented properly and that it is effective.

With support from federal water resource programs, DOF was able to sustain adequate field presence. The Act is most effectively implemented through early contact with landowners and operators during review of detailed plans of operations and field consultations. In 2003, the division also expanded compliance monitoring and effectiveness monitoring activities, resolved Region I stream classification issues, and updated riparian management standards for Region III (interior Alaska).

Challenges for the coming year include adoption of regulations to implement the Region III riparian standards, completion of the Region II riparian standards, and solidifying use of the compliance score sheets on public and private timber operations statewide. Reforestation issues are emerging as an

area of emphasis, including resolution of reforestation problems on Afognak Island, review of reforestation standards for Regions II and III, and the ongoing need for reforestation of areas on the Kenai Peninsula that are exempt from reforestation standards.

Activity Summary

Forest practices activity increased in the Southern Southeast Area but was stable to declining in other parts of the state (see table on page 8). The number and acreage of new detailed plans of operation was down most sharply in the Kenai-Kodiak Area, reflecting the decline in timber salvage operations following the bark beetle infestation. In interior Alaska, the level of activity remains low, although the 330 acres in new DPOs was the largest area notified in five years.

Notifications and inspections. The Division of Forestry received and reviewed 94 new DPOs and 49 renewals for private, municipal, and trust lands in 2003. New DPOs covered 27,982 acres and 189 miles of road. The division conducted 125 field inspections during a total of 195 field days. Overall, the level of FRPA activity covered by new notifications decreased 12 to 17 percent from Fiscal Year '03 depending on the indicator.

Two types of activity increased from last year. First, requests for variations to harvest within buffers were the highest in four years. All buffer variation requests were in the Northern and Southern Southeast areas. Second, the Kenai-Kodiak Area saw an increase in requests for exemption from reforestation requirements on the Kenai Peninsula.

Enforcement. No notices of violation or stop work orders were issued in 2003. Three directives were issued in 2003. This, along with initial results from compliance score sheets, indicates that compliance with FRPA requirements continues to be high.

This year, a judgment was rendered on the first criminal case pursued under the Forest Resources & Practices Act. An operator on Prince of Wales Island cut timber up to the bank of Poorman Creek, a catalogued anadromous stream on private land. DOF had shown the stream to the operator and identified required buffers in a pre-operation inspection. The case warranted criminal action because of the degree of negligence involved. DOF turned the case over to the district attorney in Ketchikan and state troopers. The operator was fined, assigned 10 days jail time, and given two years probation.

Monitoring. The Forest Resources & Practices Act requires monitoring to:

- assess how well the Best Management Practices (BMPs) are being applied,
- ensure that the measures for controlling non-point source pollution are being implemented,
- identify training needs, and
- determine whether the BMPs are workable on the ground.

The division's top priority for monitoring is to ensure that operators comply with the Act and BMPs. The second priority is to conduct monitoring research that addresses the effectiveness of the Act and its regulations.

In 2003, the division:

- Implemented new compliance score sheets in Region I. DOF foresters use the score sheets during routine field inspections to quantify operators' compliance with required BMPs and identify training needs for operators and agency staff. The division will complete score sheet testing for Regions II and III in the 2004 field

season, and revise the score sheets for those regions as needed. For the 26 score sheets used in Region I in 2003, overall compliance averaged 92.7 percent across all BMPs.

- Updated the riparian buffer inventory at Michael Creek to assess long-term changes in riparian conditions following partial harvest within the buffer.
- Participated in a joint research project to collect baseline water quality data on Shaw Creek where new harvesting, roads, and mining are occurring. Cooperators include the Alaska Boreal Forest Council and G.W. Scientific.
- Contracted with Tanana Chiefs Conference, Inc. to conduct a five-year re-measurement of riparian buffers established in 1997 as part of a long-term study to document the effects and persistence of buffers over time. The final report will be submitted in the first quarter of 2004.
- Worked with DEC, DNR's Office of Habitat Management & Permitting and affected interests to prioritize new effectiveness research, and to seek funding for high priority projects.

This group identified the following high priority effectiveness monitoring projects, all of which were funded for Fiscal Year 2004:

- Status and trends of fish habitat condition on private timber lands in Southeast Alaska – Sealaska project manager, funded by Section 6217 grant,
- The effectiveness of standard buffer zones to supply large woody debris to streams in Southeast Alaska – Sealaska project manager, funded by Section 6217 grant,
- Literature Review of the Effectiveness of the Alaska Forest Resources and Practices Act – Tanana Chiefs Conference project manager, funded by Section 6217 grant, and
- Protocols for finding fish in small streams – Chris Stark, UAF project manager, funded by Bering Sea Fisherman's Association.



Ed Weiss with DNR Office of Habitat Management and Permitting samples a stream for anadromous fish. Fish surveys help operators design the appropriate harvest buffers.. (photo by Wade Wahrenbrock)

Forest Resources & Practices Act Administrative Activities on Private Land

Region	New Harvest Plan Notifications			Harvest Plan Renewals			Harvest Acreage in New Notifications			Number of Inspections			Variation Requests		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
Coastal															
Kenai-Kodiak	27	55	33	11	19	24	16,008	21,185	13,097	61	57	43	0	3	1
Mat-Su/SW	0	3	2	11	11	0	0	367	578	22	8	12	0	0	0
No. Southeast	19	10	6	7	5	3	9,619	5,839	1,780	25	24	11	2	2	2
So. Southeast	36	43	51	10	21	22	5,599	7,667	12,197	44	43	58	4	13	16
Coastal Total	82	111	92	39	56	49	31,225	35,058	27,652	152	132	124	6	18	19
Northern															
Copper River	1	0	0	0	0	0	275	0	0	0	0	0	0	0	0
Delta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fairbanks	0	1	2	0	0	0	0	82	330	0	1	1	0	0	0
Tok	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Northern Total	1	1	2	0	0	0	275	82	330	0	0	1	0	0	0
State Total	83	112	94	39	56	49	31,500	35,140	27,982	152	133	125	6	18	19

Region	Variation Trees Reviewed*			Acreage Reviewed for Reforestation Exemptions			Acres Reviewed for Reforestation Compliance			Notification of FRPA Violation			Road Miles in New Notification		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
Coastal															
Kenai-Kodiak	0	0	0	16,517	6,911	16,455	2,236	6,553	4,217	0	0	0	65	146	96
Mat-Su/SW	0	0	0	0	0	0	8,778	0	0	0	0	0	0	3	5
No. Southeast	144	126	199	0	0	0	655	0	5,400	0	1	0	104	20	10
So. Southeast	103	165	336	0	0	0	106	0	0	2	0	0	39	58	71
Coastal Total	247	291	535	16,517	6,911	16,455	11,775	6,553	9,617	2	1	0	208	227	182
Northern															
Copper River	0	0	0	0	0	277	0	16,000	25	0	0	0	0	0	0
Delta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fairbanks	0	0	0	0	0	0	265	0	0	0	0	0	0	1	7
Tok	0	0	0	0	0	0	0	3,000	0	0	0	0	0	0	0
Northern Total	0	0	0	0	0	277	265	19,000	0	0	0	0	0	1	7
State Total	247	291	535	16,517	6,911	16,732	12,040	25,553	9,642	2	1	0	208	228	189

* Variation Trees Reviewed covers all trees inspected on site in site-specific variations. This includes trees approved or denied for harvest plus other trees, such as those that are withdrawn from the variation request or that are found to be outside the riparian buffer. It does not include trees harvested in small streamside zones under 11 AAC 95.240.

Region I	Coastal Alaska
Region II	Southcentral - boreal forest south of the Alaska Range
Region III	Interior Alaska

Resource Management

The Division of Forestry manages forests for multiple use and sustained yield of

renewable resources on 20 million acres of state land. This includes the Tanana

Valley State Forest and Haines State Forest with a combined total of over two million acres. The division conducts personal use, commercial timber, and fuelwood sales. It emphasizes in-state use of wood for value-added processing.



Jim Eleazer, Coastal Regional Forester (left) and Chris Maisch, Northern Regional Forester. (photo by Dean Brown)

The division, in cooperation with federal agencies, surveys forested lands to assess the impacts of insects and disease and recommends preventative measures and treatments. Division staff provide technical assistance and administer federal grants to private landowners and local governments to help them establish and properly manage forested lands in both rural areas and urban communities.

Coastal Region

Northern Southeast Area

Timber Harvest. Timber operations on the Haines State Forest continue to concentrate on small timber sales to local sawmills for value-added timber processing. Interest has been expressed in two larger sales that are available for purchase over the counter but there have been no bids.

In Fiscal Year 2003, the division sold 20 small, negotiated sales to local operators for a total volume of 462 MBF. This timber helped supply six to seven local mill owners with material for processing. Most of these mills cut and sell rough-cut green spruce lumber. One mill is cutting hemlock boards that are shipped to Washington for reprocessing as door and window trim. Some of the timber is processed as house logs and shipped to a nearby Yukon market and some is being shipped as far as Delta Junction and the Mat-Su Valley. Local operators continue to search for specialty markets with a focus on primary product manufacturing.

Thinning. Pre-commercial thinning continued on the State Forest with 63 acres completed in 2003 and contracts

for another 40 acres begun. A total of 1,642 acres has been thinned since the program began in 1993. Thinning trees competing for sunlight maintains the tremendous growth rate of these stands and creates larger trees in a shorter period. Thinning has the added benefit of creating browse for moose. Several areas are not being thinned to allow for comparison and to provide diversity. The stands where most of the thinning is occurring were harvested in the late 1960s and early 1970s and are now 20 to 60 feet tall and 6 to 14 inches in diameter.

Pruning. The division continued its pruning program by pruning trees on 44 acres in 2003. A total of 137 acres have been completed, or are under contract, since 2000. Second growth stands that have been thinned at least two years previously are pruned. A local contractor prunes the branches up to 16 feet from the base of the tree. The larger diameter dominant trees are selected for pruning at a density of about 75 trees per acre. The goal of pruning is to provide clear or knot free lumber over the remainder of the 120-year rotation age, which provide higher value lumber in the future.

Southern Southeast Area

Timber Harvest. The Southern Southeast Area sold 14 timber sales for a total volume of 3,683 MBF in Fiscal Year 2003. These sales went to one mid-sized mill and six small mills, in an area from Petersburg south to the Canadian border. Two shake and shingle mills and one dry kiln operator purchased state timber sales this year. One operator continues to log and process timber from a high value-added timber sale sold in 2001. Logging operations were completed on the Yatuk #9 sale, where a grove of culturally modified trees were located during the planning stages of the sale. The location and integrity of the modified stumps were maintained during the harvest operations, to allow the State Historic Preservation Office to date the modifications done to the trees by early residents. Four more timber sales were laid out and readied for sale during the latter part of 2003.

The local timber industry continues to expand its capability to produce high value-added products. Five dry kilns have been installed in local mills and more secondary manufacturing facilities are being planned. Market prices for green

lumber continue to be low, especially for hemlock. These low prices have forced the local industry to produce higher valued-added products for local use and for niche markets.

There is renewed interest in re-opening the veneer plant in Ketchikan. The SSE Area provided timber supply information to an operator interested in running the plant.

Silver Bay Logging's sawmill in Wrangell was shut down for part of the year while Silver Bay went through Chapter 11 bankruptcy procedures for re-financing. The mill is expected to re-open in the spring of 2004. Silver Bay currently has one state timber sale under contract and the division expects the mill to be interested in more state timber sales when it re-opens.

Land Exchange. A land exchange was proposed between the Mental Health Trust Land Office and the state involving 5,000 acres of Mental Health Trust land near Ketchikan and 2,000 acres of state land south of Thorne Bay. The SSE Area cruised and prepared logging plans and appraisals for both tracts. This information was provided to the Governor's Office for review and for a decision on whether or not to accept this exchange.

Other Assistance. SSE Area foresters:

- performed field inspections of right-of-way clearing operations on state land along the Swan Lake and Lake Tyee intertie project for the Division of Mining, Land & Water.
- provided timber information to DLMW in support of subdivision land sales.
- worked with the Alaska Forest Association to refine timber sale appraisal values for the U.S. Forest Service.
- worked with the AFA and a local mill operator on a commercial thinning and forestry research area.
- continued planning for joint timber sales with the Forest Service in Wrangell, Ketchikan, and Craig as the roadless rule for the Tongass National Forest gets resolved.

- provided small research areas for a Forest Service study of pre-commercial thinning and rotation ages.

- provided yellow-cedar logs to the Ketchikan Technology Center for its work on structural properties of yellow-cedar lumber.

- maintained RSAs with the University of Alaska Statewide Office of Land Management and the Mental Health Trust Office to provide timber sale layout and related forest management.

Kenai - Kodiak Area

During the past few years, most of the timber harvested on the Kenai Peninsula has been beetle-killed, low quality spruce, which was sold as pulp logs or processed pulp chips. Unfortunately, due to depressed global demand for pulp, the two round log contracts to the British Columbia pulp market and the pulp contract to Japan were terminated in 2003. The last pulp ship was scheduled for January 2004.

Rolco Pacific Inc. has marketed sawlogs to a local sawmill and to the Korean export market for the past couple of years. Another operator has secured a small contract to export low-end sawlogs to Korea. Both markets require relatively sound wood, which eliminates most of the beetle-killed timber on the peninsula. Trees killed recently, however, can be used. Logging contractors continue to supply green logs and recently killed spruce to a few local sawmills. One mill has added a dry kiln to its operation, which has increased the marketability of the products. It secured a contract with Home Depot and delivered its first shipment in the fall of 2003.

Depressed market conditions are affecting operations. Harvest operations on Native and Mental Health Trust lands in the Tyonek area were halted prior to the completion of the contracts. The pulp chip loading facility on the Homer Spit is scheduled for relocation to the Port of Valdez in early 2004. As

a result, operators are having a difficult time selling lower quality timber and are concentrating on recently killed or live timber, which is in limited supply on the peninsula.

Timber Harvest. In 2003, DOF offered 31,502 MBF in 10 timber sales and sold 12,500 MBF in 7 timber sales. The Towson and Moose Pass fuel break timber sales were completed.

The Kenai Peninsula Borough Fuel Reduction/Salvage Program sold eight sales on 955 acres and harvested 2,422 acres last year. All sales were concentrated in the wildland-urban interface.

The Kenai-Kodiak Area started a new permit program for removing dead spruce on state land next to developed property. The Hazardous Fuels Reduction Permit may be issued for up to 40 acres and is effective for up to one year. There is no fee for the permit. The program allows a quick reaction to requests by adjacent landowners and operators.

Often, operators removing dead trees from land adjacent to state land are willing to remove dead timber from state land if they can get approved while their equipment is on site. This program will reduce the fuels next to developed areas and help reduce the cost of fire suppression for the state.

Roads. Seven miles of the Falls Creek Road, which is on state land, was upgraded in 2003. Work included removing ditches, installing culverts, resurfacing, and final grading.

The 2002 fall floods substantially damaged logging roads on Native corporation land. Cook Inlet Region Inc. decided to close its roads rather than rehabilitate them because most of its beetle-killed trees have been salvaged and current market conditions are poor.

Ninilchik Native Association Inc., on the other hand, has decided to keep most of its roads open to pursue potential resource and recreational development.

Timber Program

Timber Volume Offered and Sold in Commercial Sales

Timber Volume Offered (MBF)*

Fiscal Year	Coastal Region Southeast	Coastal Region Southcentral	Northern Region	State Total	Number of Sales
1998	15,128	18,412	22,689	55,229	84
1999	5,302	7,777	15,522	28,601	55
2000	11,599	9,361	14,966	35,926	88
2001	5,954	8,568	17,999	32,521	98
2002	16,655	3,749	17,756	38,160	94
2003	9,452	12,470	15,027	36,949	105

Timber Volume Sold (MBF)

Fiscal Year	Coastal Region Southeast	Coastal Region Southcentral	Northern Region	State Total	Number of Sales
1998	14,623	17,754	13,211	45,588	60
1999	4,797	2,803	6,953	14,553	32
2000	8,365	5,774	6,640	20,779	60
2001	954	1,857	6,064	8,875	60
2002	11,340	1,333	4,207	16,880	56
2003	4,145	9,779	4,813	18,737	68

*Timber offered includes new offerings, reoffers, and over-the-counter sales.

Timber Program Revenue

Fiscal Year	Revenues
1998	\$773,200
1999	\$339,900
2000	\$334,300
2001	\$370,200
2002	\$454,100
2003	\$475,900

Note: Timber program revenue is primarily from timber sales; approximately two percent of the revenue comes from other sources, including log brands, seedlings, retained damages, and document fees.

Personal Use Permits - FY 2003

Coastal Region - Southeast	3
Coastal Region - Southcentral	12
Northern Region	316
STATE TOTALS	331

Units of Measurement

Board foot (bf) = the unit used to measure lumber. One board foot equals one foot square by one inch thick. In log scale, one board foot is the amount of wood fiber that, if sawn, is estimated to produce one foot of lumber.

MBF = thousand board feet
MMBF = million board feet

State Fiscal Year 2003:
 July 2002 - June 2003

Mat-Su / Southwest Area

Timber Harvest. The Mat-Su/Southwest Area sold 196 MBF of commercial timber to three mills in the Mat-Su Valley in FY '03. They were relatively small, over-the-counter timber sales that had first been offered in 2001 and 2002. Approximately 300 MBF of white spruce is still available over the counter in the Houston/Deception Creek Forest Management Area. All timber harvested from state lands was used for high value-added wood products in Alaska.

NPI, LLC and the Mat-Su Borough are working to procure a wood chip facility on borough property near the port at Point MacKenzie. Terry Nininger, the project manager for NPI, LLC, is working on construction of the facility and on procuring the raw material for the facility.

The Mat-Su District scarified 20 acres of previously harvested timber sale units to improve regeneration. These areas will be monitored for regeneration in the future.

Forest Resources. A contractor for the Alaska Department of Fish & Game, using money received by the Ruffed Grouse Society, cut approximately 85 acres of aspen in the Matanuska Valley Moose Range. The cutting will increase root sprouting from aspen stumps and create habitat and feed for ruffed grouse and moose. The Division of Forestry provided silvicultural recommendations, air photos, and contract sale administration advice to ADF&G. The division and the intern crew constructed a fence around a two-acre area in which the Ruffed Grouse Society will plant aspen. The fence will

protect aspen seedlings and allow a comparison of growth and reproduction in un-browsed areas.

Intern Program. Eleven forestry interns were hired from the Anchorage King Career Center and the Mat-Su Valley for the 2003 field season. The crew worked on a variety of natural resource projects during the nine-week work season.

Nelson Stegall, the Forestry Intern Crew Foreman, provided excellent leadership, training, and a well-rounded program of challenging projects, and educational opportunities. The interns worked hard, learned new skills, solved problems, and worked as a team.

Interns completed the following projects as they learned skills in the fields of recreation, forestry, fire suppression, and fish and game management:

- Completed trail and campground work around Byers Lake in Denali State Park.
- Improved the Dew Mound Trail near the Eagle River Nature Center in Chugach State Park.
- Placed tubes around 5,000 larch seedlings planted in the Willow Experimental Forest, to protect the trees from being browsed.
- Studied many aspects of forestry on state forestry land in the Houston area. They surveyed all major roads and trails, completed an informal survey of a tree planting project, and worked on a 25-acre, 100 percent timber cruise.
- Toured a logging operation to learn about best management practices and reforestation. Followed the logs from

the field to a mill where they saw them processed into a finished product.

- Began thinning in a twenty-year-old experimental tree planting at the Plant Materials Center.
- Learned to identify native forest plants.
- Planted 5,000 white spruce seedlings in several locations on the Anchorage Hillside to replace trees killed by the spruce bark beetle.
- Planted trees for neighborhood beautification and rehabilitation in Anchorage.
- Helped the Anchorage Fire Department plant 150 one-gallon spruce in four fire breaks on the Anchorage Hillside and built a fence to prevent vehicle access.
- Completed an experimental planting of alder for the Stewardship Program. The planting will help determine the success of transplanting alder and their use as firebreaks.
- Completed the S-190 and S-130 fire training program and received hands-on training from the Mat-Su Fire Suppression Crew. All interns that were over 18 received Red Cards.
- Constructed a fence around 2,000 aspen seedlings in the Matanuska Moose Range to create habitat for ruffed grouse.

Northern Region

Fairbanks Area

The Fairbanks Area Office sold nine commercial timber sales, amounting to 3.6 million board feet of timber. The end product value of these sales is over \$1 million. Fifty-five active timber sales were under contract and included road construction valued at \$305,000.

Overall, market demand is up slightly over past years. Local mills, particularly Northland Wood Products and White Spruce Enterprises, have been processing wood for local markets. Local operators are also interested in trees killed by fire or beetles, which are used to satisfy the demand from eight local mills for turning logs.

After the plan for Unit 2 (Minto, Nenana, Manley Hot Springs area) of the Tanana Valley State Forest was completed in the summer, the Fairbanks Area conducted the field work for the Tanana West Timber Sale #2. It will be offered in the spring of 2004 and include 2.25 million board feet of spruce saw logs. This is the sale that led to sales being put on hold until the planning was completed.

Large birch sales in this and other units of the forest are being considered, based on interest from potential markets. Field work continues on Tanana West Timber Sale #3 with 2.25 million board feet, which is planned for offer in the fall of 2004.

Staff continue work on a grant to study the mechanical removal of hazardous fuels near communities, and to explore markets for the wood removed. Potential uses are as chunk wood to apply to forest roads to reduce soil erosion, and as hog fuel for cogeneration at local power plants and boilers. In 2004, chips from these projects will be applied to forest roads and used in a test burn in a boiler at Kenny Lake.

More than 200,000 white spruce seedlings were planted on 450 harvested acres during the summer. The seedlings are growing well, providing timber for the forest industry in the future.

Ruffed grouse habitat improvement.

The Division of Forestry, Department of Fish & Game, and the Ruffed Grouse Society (RGS) continue to improve habitat in the Fairbanks Area. The Nenana Ridge Habitat Project is an opportunity for long-term cooperative management by the state's foresters, wildlife biologists, and the Ruffed Grouse Society.

Fire suppression over the last 40 years has resulted in fewer young vigorously growing aspen and birch stands. Such stands are critical sources of nutrition and cover for wildlife. In the grouse project area, foresters and biologists use timber harvest to enhance habitat for ruffed grouse. The project is also good for snowshoe hares, lynx, moose, goshawks, great horned owls, and several species of migratory songbirds, which use early to mid-successional habitats.

Over the 40 year cycle of this project, it is expected that habitat will be created and maintained for 100 breeding pairs, producing a total of 20,800 ruffed grouse on the



The DOF team took first place at the UAF School of Natural Resources and Agricultural Sciences, Forestry Sports Festival. Events range from cross-cut sawing, ax throw, and pulpwood toss to log rolling in the nearby lake. From left to right: Kerry Shaw, Pete Buist, Jo Bante, Chris Maisch, Peter Simpson, Paul Keech. (photo by Mr. Shaw)

800 harvested and treated acres. Many thousands of days of hunter opportunity will be provided.

A portion of the funds raised at Fairbanks Ruffed Grouse banquets went to DOF and ADF&G to fund this effort. The Alaska Legislature appropriated additional funds to ADF&G for this project.

In early May, DOF and ADF&G prepared two units, totaling 30 acres, for a prescribed burn to benefit ruffed grouse near the lower reaches of Nenana Ridge Road. Due to poor conditions for burning, the prescribed burns have been re-scheduled for the spring of 2004.

An additional 30-acre burn is planned on harvested areas at Standard Creek. RGS and ADF&G funds will also be used as part of a fuels treatment project in the Little Chena drainage that will cover nearly 2,000 acres.

In August, ADF&G and the Division of Forestry contracted blade scarification of 12 acres at Nenana Ridge. The scarification will allow birch to seed in and increase birch regeneration in a previously harvested area.

The Alaska Bird Observatory wrapped up a songbird study of the treatment areas in 2003. This study, funded by the Ruffed Grouse Society, found that the density and variety of songbird species increased dramatically in the harvested areas.

Participants in the Nenana Ridge project had hoped to clear at least 200 acres each decade through the year 2030. Since 1994, project managers have constructed 7.5 miles of forest roads, felled 476 acres of mature aspen in 42 cutting units ranging from 6 to 20 acres, and burned 67 acres.

Tok Area

Timber Harvest. The Tok Area sold two timber sales totaling 82.5 MBF in Fiscal Year 2003.

Planning continued on the Tok River Wildlife Habitat Timber Sale, a value-added sale on the Tok River south of the community of Tok. The sale will be offered early in 2004.

The Area Forester participated in the Forest Practices Monitoring Committee by providing feedback and program direction in this important arena.

Valdez/Copper River Area

Timber Harvest. The Valdez/Copper River Area continues to negotiate commercial timber sales in the Tolsona Ridge area. The beetle-killed trees in these sales have become a preferred species for several of the local mill operators whose primary market is high quality milled logs and beveled siding. In Fiscal Year 2003, the Area sold five sales totaling 957 MBF. One sale encompassed over 200 acres of commercial timber in an area designated for agricultural disposal in 2005. In cooperation with the Division of Agriculture and the local Kenny Lake Soil and Water Conservation District, DOF built 12,000 feet of winter road, giving access to the sale area and establishing the right-of-way for the future all-weather road. The recently opened timber bridge provided access over the Trans-Alaska pipeline into the sale area.

Personal Use Products. The Valdez/Copper River Area offers personal use wood from Cordova to Sourdough. The personal use program in Cordova, in conjunction with the U.S. Forest Service, continues to be successful. Residents can apply for permits to access both sawlog quality wood and firewood. A total of 1.5 million board feet of sawlog and cordwood have been distributed under this personal use program.

Closer to the central Valdez/Copper River Area, local residents continue to take advantage of the half dozen roadside personal use areas, as well as the remote sale program. The McCarthy Area, in particular, has seen an increase in requests.

Forest Regeneration. Area staff completed additional regeneration surveys on Ahtna land this fall near the Klutina and Tazlina Rivers. These areas were chosen for their riparian buffers and surveyed for new regeneration and residual mortality.

Delta Area

Timber Harvest. In 2003, the local industry harvested 875 MBF of sawtimber and firewood on 122 acres adding \$38,393.15 to the state's general fund. All of the sawtimber was processed locally and used within the state. The Delta area sold 7 timber sales in FY '03 totaling 186 MBF of sawtimber and firewood on 41 acres. The area office also issued 30 personal use firewood permits that totaled 128 cords for \$465.

Reforestation. The Delta Area timber sales are designed and harvested in a manner that facilitates natural regeneration. Harvest units incorporate boundary seed trees, partial and selective tree harvesting, and scarification to encourage natural seeding. Planting is done when necessary.

Pogo Gold Mine. The Pogo Mine access route and power line overlays a 381-acre timber sale on the north side of Shaw Creek Flats. The timber sale was offered on December 16 and is available for sale over the counter. About 700 acres of forest will be cleared for the right-of-way and the mine site. Most of the trees will be of low value or no commercial value. The commercial white spruce sawlogs will be used and the division plans to offer the commercial timber as it becomes available.

Local Timber Industry. The local forest products industry had tough competition from a new big box store in Fairbanks. The larger store undersold the locally produced rough cut lumber and provided free delivery for large orders in the Delta area, causing decreased demand for local wood. The local industry is trying to develop niche markets and maintain the existing products of house logs, timbers, and rough-cut lumber.

Future Plans. The forest industry near Delta has potential for growth, especially if the railroad and gas line are extended to the area. The area needs a market for low value white spruce, birch, and aspen logs to complete the forest management spectrum and hopes to someday have a local mill to use low value logs.

The Delta Area is developing timber sales that will eventually extend the Quartz Lake Road. Additional sales are planned in the Indian Creek, Rapid Creek, and Black Lake areas.



An excavator digs gravel to spread on a logging road for a Delta Area timber sale. The gravel was spread on road fabric covering the road bed. The 90-acre timber sale was purchased by Granite Mountain Alaska Lumber. (photo by Steve Joslin)

Log Brands

In 2003, the Division of Forestry registered 42 log brands. Of these, 10 were new and 32 were renewals. This is a decrease from 2002 and 2001. However, there would have been a sizeable increase had Ketchikan Pulp Company not ceased operations. They chose to have 19 brands slated for renewal lapse as they terminated operations.

A log brand is required for any log that is transported by water and it must be renewed every five years for the operator to retain ownership. A new log brand book with all brands issued or renewed for calendar year 2004 will be available in March 2005.

Beach Log Salvage

The beach log salvage program allows operators to recover a valuable forest resource from coastal waters and beaches in Southeast Alaska for personal or commercial use. Removing floating timber from navigable waters also makes water travel safer. The Division of Forestry works with the U.S. Forest Service to permit licensed salvagers to retrieve logs from above the mean high water mark on Forest Service property.

At the end of 2003 10 of the 56 identified salvage areas had been applied for or licensed. A depressed export market and dwindling pulp market have affected beach log salvage activity in recent years. Another contributing factor is that the mode of log transport is slowly shifting from log rafts to barges, thus decreasing the number of logs in the water. However, the division continues to receive inquiries about salvage opportunities.

Reforestation

Regeneration of harvested or naturally disturbed areas is an essential part of forest management on state land. To achieve a sustained yield of wood fiber from forestland, the division collects cones for seed processing and contracts for seedling growth. The Division of Forestry cooperates with the University of Alaska and other agencies to conduct research for success in seedling survival.

The division maintains a tree seed bank with assistance from the DNR Division of Agriculture. Tree seed is cleaned, tested, stored, and shipped to nurseries. The division has been collecting and storing seed for more than 25 years and provides seed to other forestry organizations that grow seedlings for reforestation.

No new seed collections were entered in the seed bank for 2003. Fortunately, white spruce seed can be stored for over 20 years if properly treated.

This year 229,100 seedlings were planted on 540 acres of state land. Scarification to prepare the ground for planting and natural regeneration was done on 229 acres. An additional 134 acres of state lands in the Haines area were pre-commercial thinned to improve timber

growth and wildlife habitat. Through federal cost-share assistance programs, the division supervised the planting of 182,560 seedlings on 338 acres of private forestlands. Alaska Native corporations reported planting 324,700 seedlings on 1,393 acres and thinning 2,850 acres. The Kenai Peninsula Borough reported planting 279,000 seedlings on 1,200 acres.

The division cooperates with the Alaska Reforestation Council to provide forest regeneration research and education. In 2003, the Reforestation Council:

- Evaluated non-native tree plantations and presented results to the Board of Forestry.
- Installed a new provenance trial for Sitka, white, Lutz, and Norway spruce on the Kenai Peninsula.
- Evaluated a UAF black spruce provenance trial.
- Published an article in the Cooperative Extension Service newsletter on Siberian larch in Alaska.

Reforestation on State Land - 2003

Areas	Seedlings Planted	Acres Planted	Acres Scarified
Delta	0	0	25
Fairbanks	200,000	437	157
Haines	14,300	50	0
Kenai	6,400	32	32
Mat-Su	8,400	21	15
TOTALS	229,100	540	229

Forest Health Protection Program

2003 Highlights

- The U.S. Forest Service Insect Suppression Fund provided a grant to the Division of Forestry to trap *Ips perturbatus* at Tanacross Village, near Tok. The goal of the project was to mitigate the *Ips* outbreak that developed in a stand of white spruce that BLM thinned in 2001 to reduce fire fuels. A National Fire Plan grant had funded the thinning/fuel reduction project. Preliminary analysis of trap-out results show a significant reduction in trees attacked in 2003 compared to a similar thinned area where the insects were not trapped. A small trap-out project is planned for part of the thinned area in 2004 to return *Ips* populations to endemic levels.
- For the second consecutive season, the division conducted attractant semiochemical (funnel trap) monitoring for potential exotic bark beetles and wood borers at five coastal sites in Anchorage and Juneau. The Animal Plant Health Inspection Service and the joint Forest Service/APHIS Rapid Detection of Exotic Scolytid Pilot Project funded this work in four western states. The U.S. Forest Service provided funds to the Oregon Department of Agriculture for insect identification services to the national project.

In 2002, the four participating states did inspections in coastal areas where it was possible that solid wood packing materials had been infested with non-native beetles and borers. In 2003, the monitoring was moved to inland areas with the potential for imported insects, such as Eielson Air Force Base, where goods and equipment pass through on their way to and from other military locations. In addition to monitoring for exotic beetles, the Alaska project assessed diversity and background information on native bark beetles and borers and the efficacy of various beetle attractant compounds and exotic beetle pheromones on native beetles.

- The division added a permanent mapping/GIS position and a non-permanent Natural Resource Specialist

in the Anchorage office thanks to increased funding from Forest Service Cooperative Survey & Technical Assistance Forest Health Monitoring grants. The division also created a Forest Health Protection field office in Fairbanks that will be staffed by one U.S. Forest Service employee, hired in the fall of 2003, and one DOF employee expected to begin in early 2004.

- With increased personnel and close cooperation with APHIS and the Division of Agriculture, DOF secured a \$140,000 grant to conduct a pinewood nematode and wood pest survey in coastal wood production areas -- primarily Southeast Alaska and Afognak Island. The project will assess the potential vectors of pinewood nematode (wood borers) in log exports to China and other Asian ports. Cooperation between agencies and private operators could help reduce restrictions on Alaska wood exports, eliminate mandatory pre-entry fumigation requirements, and lower costs for forest landowners.
- Forest Health Management staff joined with the Community Forestry Program in March to offer a seminar on insects and diseases of urban forests. The seminar was

held in Anchorage and attended by over 100 people. It was co-sponsored by the Forest Service/State & Private Forestry and the Cooperative Extension Service.

- The Forest Health Protection Program also:
 - Participated with the U.S. Forest Service on the annual forest damage survey, which covered 32 million acres. The coverage is expected to increase by 20 percent annually beginning in 2004 due to additional Forestry staff. For the first time, the division has the capacity to collect aerial survey resource data electronically "on-the-fly" and process the data in-house.
 - Received a significant increase in grant funds from the Forest Service Forest Health Protection Program for prevention, suppression, and restoration projects on non-federal lands.
 - Initiated the first biological control project for an introduced insect in Alaska. In cooperation with the Forest Service and APHIS, the division will release a parasite of the amber-marked birch leaf miner to control this insect pest of birch trees beginning in 2004.



After thinning to reduce fuels in 2001, the Alaska Fire Service and Tanacross Village asked the state to trap for *Ips perturbatus*. (photo by Roger Burnside)

2003 Forest Insect and Disease Activity

Damage Agent	State & Private	National Forest	Other Federal	Native Corporation	Total 2002
Aspen leaf miner	85,879	0	227,933	37,246	351,058
Birch leaf miner	32,126	0	201	75	32,402
Birch leaf roller	184,619	0	0	401	185,020
Black-headed budworm	9,970	1,713	8	3,359	15,050
Cedar decline faders ¹	464	8,520	100	31	9,114
Cottonwood defoliation ²	441	3,133	0	9,494	13,068
IPS engraver beetle	10	0	120	335	465
Larch beetle	0	0	3,813	18,724	22,537
Larch sawfly	0	0	258	298	556
Large aspen tortix	107	0	244	0	351
Spruce aphid	3,823	9,286	16,188	1,330	30,627
Spruce beetle	38,334	1,843	14,362	37,769	92,308
Spruce budworm	29,435	0	1,449	0	30,884
Spruce/larch budworm	332	0	0	0	332
Willow defoliation ³	31,274	0	25,828	26,752	83,854
TOTAL ACRES	416,814	24,495	290,504	135,814	867,627

¹ Acres represent only spots where fading (reddish) trees were noticed.

² Significant contributors include cottonwood leaf beetle and leaf rollers

³ Significant contributors include leaf miners and leaf rollers



The division is assessing the types and levels of wood-boring beetles in the coastal spruce/hemlock forests to help forest industry landowners meet federal wood pest export guidelines for Asian markets. (photo by Roger Burnside)

The figures above are from *Forest Insect & Disease Conditions in Alaska - 2003*, prepared by the U.S. Forest Service, State and Private Forestry, Forest Health Management, Region 10 Alaska. The number of acres are estimates based on surveys of about 20 percent of Alaska's forested land. Ownership is derived from the 1999 land status GIS coverage from the Department of Natural Resources Land Records Information Section.

The figures report visible, new pest activity for the current year. They do not give the total accumulated pest damage over a span of years. Some damage is not immediately apparent or the cause cannot be determined from the air. For example, spruce bark beetle damage is not visible from the air until the foliage turns red. The table also does not include many of the most destructive diseases, such as wood decays and dwarf mistletoe, because they are not detectable in aerial surveys.

Compare aerial survey acreage figures with other information, such as previous years' condition reports and on-the-ground surveys, for the most reliable picture of damage severity and trends.

More information is available from entomologists at the Division of Forestry (907-269-8460) or the U.S. Forest Service (907-743-9455).

Forest Insect Activity 1999 - 2003 (in thousands of acres)

Damage Agent	1999 Total	2000 Total	2001 Total	2002 Total	2003 Total	10-Year Cumulative
Alder defoliation	1.8	5.6	1.2	1.8	2.8	13.6
Aspen defoliation	13.4	12.6	9.4	301.9	351.4	748.6
Birch defoliation	2.8	2.8	3.2	83.0	217.5	541.7
Cottonwood defoliation	5.6	5.4	9.9	19.9	13.1	72.5
Hemlock defoliation	0.1	5.2	1.3	1.4	0.2	30.7
Hemlock mortality	0	0	0.1	0.2	0	0.6
Larch defoliation	159.5	64.9	17.8	0	0.6	1,556.1
Larch mortality	18.4	0	0	4.8	22.5	45.9
Spruce defoliation	5.1	84.7	61.1	11.0	61.5	834.3
Spruce mortality	258.0	120.9	104.2	53.6	92.8	3,434.9
Spruce/hemlock defoliation	0.1	0	50.7	3.4	15.1	302.8
Spruce/larch defoliation	0	0	0	0	0.3	17.1
Sub-alpine fir mortality	0	0	0.1	0.2	0	0.3
Willow defoliation	181.6	36.5	10.9	0.3	83.9	535.7
TOTALS (thousands)	646.4	338.6	481.5	481.5	861.7	8,134.8

Forest Insect Activity

Most damage shown in the chart above was caused by insects. However, foliar disease contributed to spruce defoliation and hemlock mortality. Damage agents such as fire, wind, flooding, landslides, and animals are not shown.

The cumulative total is the number of newly infested acres, not the sum of infested acres each year. The same stand may have an active infestation for several years. The cumulative total is a union of all areas 1994-2003.

Acreage shown is in thousands of acres. For actual number, move the decimal three spaces to the right, for example, 2.2 is 2,200.

Insect & Disease Information

For information on forest health and forest insect surveys, the 2003 and past forest pest conditions reports (pdf format), and links to forest health web sites, see the Division of Forestry website: www.dnr.state.ak.us/forestry/insects.htm

For addresses of federal entomologists and plant pathologists, current forest insect and disease conditions (aerial and ground survey data), lists of forest health research and publications, and a bibliography of Alaska forest health management publications, see the U.S. Forest Service State and Private Forestry home page: www.fs.fed.us/r10/spf/fhp/

To request maps or other products from statewide surveys and GIS databases, contact:

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Forest Stewardship Program

The Forest Stewardship Program is a federally funded program administered by the Division of Forestry. The goals are to help non-industrial private forest owners develop management plans and implement appropriate forest management practices.

2003 Highlights

- Two Alaska Native corporations completed Forest Stewardship Plans for their land.
- A forest stewardship planning grant was awarded to an Alaska Native corporation.
- Forest Stewardship plans were prepared for and signed by 31 individual forest landowners.
- Projects were approved for 117 homeowners to use federal funds to reduce the hazard of spruce killed by bark beetles.
- Forest Stewardship Program staff organized a Firewise conference for interior Alaska in Fairbanks.
- Federal cost-share programs funded the planting of 182,560 seedlings on 388 acres of private lands.

Planning by Alaska Native Corporations

An important service of the Forest Stewardship Program is providing forest planning grants to Alaska Native corporations and reservations, which are the largest private landowners in Alaska. Two Native corporations, Mendas-Chaag Corporation and Huna Totem Corporation, completed forest stewardship plans in 2003, covering a total of 78,274 forested acres. Nineteen Alaska Native corporations now have forest stewardship plans, covering 3,232,617 forested acres.

A new forest stewardship planning grant was awarded to Sealaska Corporation covering 25,800 acres of its Hoonah management area. Planning projects are underway with seven other Alaska Native corporations.

Planning by Individual Landowners

In 2003, forest stewardship plans were prepared for 31 Alaska landowners covering 1,620 acres. Since the program began in 1992, a total of 455 plans have been developed for individual landowners, covering 33,046 acres. Participation is greatest on the Kenai Peninsula, with the Matanuska-Susitna Borough and Tanana Valley also having many participants. Private landowner assistance on the Kenai Peninsula was aided by funds from the Kenai Peninsula Borough Spruce Beetle Program. The most common management objective is reforestation after spruce beetle kill. Many participating landowners have strong interest in aesthetics and wildlife. Defensible space from wildfire is a growing concern.

Cost-Share Results

The Forest Stewardship Program provides field inspections for implementing approved management practices on private lands through cost-share programs. This was the second year to implement a special appropriation under the federal Forestry Incentive Program (FIP) to address beetle-killed spruce. With FIP, \$306,468 was obligated for 77 landowners covering 726 acres. So far, 183 acres have been treated by 23 landowners. FIP practices were primarily removing dead spruce, scarification, and planting.

Forest Stewardship is helping to implement federal wildland urban interface fuels reduction grants. In 2003, 40 projects were approved and 13 acres treated. Fuels were reduced primarily by felling and disposing of dead spruce near homes.

Congress passed the Forest Land Enhancement Program (FLEP) in 2002 and implementation began in 2003. The U.S. Forest Service approved Alaska's FLEP Priority Plan and workshops were offered to Alaska Native corporations and Forest Stewardship Committee members. Although funding was not available until July, FLEP projects were approved for 20 landowners obligating \$169,161 and covering 203 acres. Through FLEP, a private consultant completed two forest stewardship plans and 53 acres of reforestation was completed with combined payment of \$26,299. With all federal cost-share programs, 182,560 seedlings were planted on 388 acres in 2003.

Other Public Services

Forest Stewardship Program personnel provided a variety of services to local governments, public schools, and community fairs. These included general education, technical forestry assistance, and tree seedling distribution. Forest Stewardship Program staff organized a Firewise conference for Interior Alaska landowners and natural resource agencies. Staff also provided site visits and referrals for numerous landowners who did not pursue a written plan. Forest Stewardship staff for 2003:

Jeff Graham, Palmer
Al Peterson, Soldotna
Ashley Reed, Soldotna
Kathryn Tietz, Fairbanks
Stan Vlahovich, Palmer

continued

Forest Stewardship Committee

The Division of Forestry receives guidance from the Forest Stewardship Committee. The committee is comprised

of representatives from a broad range of Alaska private landowner interests. Areas of discussion include grant and cost-share rates, eligibility criteria, and Forest Stewardship Plan requirements. Important topics at the committee's

two meetings in 2003 were the Forest Legacy Program's proposed parcels for forest conservation and the Forest Land Enhancement Program practice prioritization. Stewardship Committee members are listed on page 46.



Before and after dead spruce removal in the defensible space zone of a Nikiski home. A wildland urban interface grant, administered by the Forest Stewardship Program, funded the tree removal. (photos by Ashley Reed).





Students from Fire Lake Elementary School in Eagle River sample birch sap. Seven schools tapped birch and made syrup as part of Tapping Into Spring. (photo by Matt Weaver)

Conservation Education

Division of Forestry conservation education programs reached more than 200 educators, university students, and Scout leaders in communities as diverse as Barrow, Sitka, Homer, and Fairbanks in 2003. A total of 15 workshops on forest management and wildland-urban interface fire safety help create an informed citizenry.

Project Learning Tree, the premier natural resources education program, sponsored by the Division of Forestry, held eight workshops statewide. Through partnerships with the University of Alaska and Alaska Pacific University, every teaching intern and teaching methods student at UAA, APU, and UAF had the opportunity to participate in a workshop. In 2004, Sheldon Jackson College and several branches of UA Southeast will join the ranks of institutions of higher learning participating in Division of Forestry education programs.

School districts, too, continue to promote conservation education as a vehicle to teach science, language arts, and math to students. The Anchorage School District sponsored three workshops, each providing a stipend to educators who completed the 15-hour course. The Mat-Su Borough School District provided facilities for training free of charge. A priority for 2004 is to increase the number of school districts actively supporting forestry education programs.

The division continues to reach out to rural educators through Project Learning Tree On-line, the first program of its kind nationally. DOF sponsored three seven-week workshops in 2003 bringing together educators from across the state and nation. This venue allows participation from educators in distant places like Anaktuvik Pass and Shageluk where logistics and cost preclude traditional training. Recently, the American Forest Foundation adopted

the Alaska PLT On-line program as a model for other state programs.

Participation in the Fire in Alaska education program doubled in 2003, providing 15 hours of training for over 100 teachers. These workshops teach educators how to present lessons in fire ecology, fire behavior, and living responsibly in the wildland-urban interface. In spring 2004, workshops are scheduled in Fairbanks and Delta.

In addition to workshops, the division sponsored or participated in a variety of other conservation education activities. Among these were Scout meetings, Outdoor Week, and Tapping into Spring, a birch tapping project with third grade classes.

In Alaska, PLT is supported by the Division of Forestry, U.S. Forest Service, Department of Fish and Game, and Alaska Natural Resources and Outdoor Education Association.

Community Forestry Program

Community, or urban, forestry is the management of forests and related natural resources in communities. The Community Forestry Program:

- Provides funding and guidance in establishing local community forestry programs.
- Fosters partnerships between government, business, nonprofits, and volunteers.
- Provides information, training, and technical assistance to local governments, tree care professionals, and volunteers.
- Encourages and supports projects that demonstrate good arboricultural and community forestry practices.
- Administers federally funded grants for pilot programs, research projects, and demonstrations that support the program objectives.
- Encourages the private sector to support and fund community forestry projects.



Arborist John Trautwein teaches pruning to Community Tree Stewards in Anchorage. (photo by Patricia Joyner)

2003 Highlights

- Held the Alaska Community Tree Steward course in Anchorage. A series of speakers covered tree biology; soils; fertilization; selecting, planting and caring for trees; pruning; problem diagnosis; and landscape design. Sixteen people completed the 30-hour course and agreed to donate 30 hours to local community forestry projects.
- Recognized Juneau and Sitka as Tree Cities USA. These towns join Wasilla, Eielson, Elemendorf, Fort Wainwright, and Fort Richardson in this national program that recognizes cities that effectively manage their community trees and forests.
- Sponsored a seminar in Anchorage on insects and diseases of urban trees and forests. The seminar was co-sponsored by Forestry's Forest Health Protection Program, the Cooperative Extension

Service, International Society of Arboriculture, and the U.S. Forest Service. Topics included monitoring and inspection, practices that affect pest problems, problem diagnosis, and specific insects and diseases. A total of 108 people from around the state attended an all-day session for tree care and forest health professionals or an evening session for homeowners.

- Worked with Alaska Community Forest Council members and Petersburg public radio station KFSK to develop a series of public service announcements called Tree Talk. Ten PSAs on tree-related topics played throughout southeast Alaska for six months. In addition, an Arbor Day message ran on public radio stations statewide. Tree Talk will resume in 2004.
- Organized presentations on proper

pruning practices, attended by a total of 250 people in Anchorage, Fairbanks, Juneau, and Sitka.

- Joined agencies statewide on the Committee on Noxious and Invasive Plant Management in an effort to limit the spread of invasive species. Staff and the Department of Transportation organized a work party to remove vetch overgrowing trees along the Seward Highway.
- Assisted the Anchorage firewise initiative in development of a custom geographic information system fuels/vegetation layer that will be used to plan evacuations, predict the spread and intensity of escaped fires in the wildland urban interface, and promote defensible space standards. Staff members also helped train the Student Conservation Association Fire Education Corps to work with homeowners.

- Partnered with Conoco Phillips and Anchorage Parks and Recreation to sponsor the fifth annual Anchorage tree adoption. One thousand lucky applicants received trees the week before Arbor Day. Arborists provided information and answered questions about tree planting and care.
- Met regularly with the 15-member Alaska Community Forest Council. The council advises the division on program priorities and activities, reviews grant applications and makes recommendations on funding projects. Members placed displays and publications on tree planting and care at 12 nurseries in 6 towns. In addition to supporting the state program, members are valuable partners in local community forestry programs. Members are listed on page 46.
- Organized a Day of Caring event at the Anchorage Memorial Cemetery for the second year. Seven arborists spent the day identifying problems and pruning trees. Three tree care companies donated climbing expertise and equipment to chip and remove debris. The work improved the trees' appearance, health, and safety.
- Cooperated with the U.S. Fish & Wildlife Service and King Career Center students to revegetate an area along Campbell Creek in south Anchorage by planting 60 spruce and eight birch.
- Distributed 300 National Tree Trust white spruce seedlings to community groups for planting in Anchorage parks and on school district property.



Alaska Community Forest Council: (back row left to right) Dave Wolfe, Denise Saigh, Warren Templin, Pat McArdle, Corinne Smith, Mike Rath, Jim DePasquale, Tom Hines (front row left to right) John Alden, Ann Lawton, Monique Anderson, Sandra Stanway. (photo by Patricia Joyner)

Wildland Fire Management

The Division of Forestry, Bureau of Land Management, and U.S. Forest Service are responsible for wildland fire suppression in Alaska. Each agency protects specific geographic areas under cooperative agreements. The state thus avoids duplication of fire protection resources and efforts, realizes substantial savings, and provides for the most efficient fire response.

Alaska is the only state with an interagency fire plan. The plan divides the state into fire protection levels based on major natural fire breaks and the objectives of land managers. Firefighting resources can be allocated

to the highest priority areas -- those areas where communities and valuable resources are located. It also gives options for lower cost strategies in remote and unpopulated areas.

Fire Protection Levels

Critical Protection: Areas where life and property are present receive immediate and aggressive suppression efforts.

Full Protection: Areas with high value resources where fire may adversely impact resource management objectives also receive immediate suppression efforts.

Modified Action: Areas with high value resources where land managers may consider the trade-off of acres burned versus suppression costs. Fires are attacked immediately but land managers guide the suppression effort.

Limited Action: Areas where fire is beneficial or benign, or firefighting costs are greater than fire damage. Fires are monitored but no suppression action is taken except to prevent the fire from burning onto higher value land.



2003 Fire Statistics

Statewide Statistics

Year	Fires	Acres Burned
1996	724	599,197.1
1997	716	2,026,899.3
1998	413	119,899.8
1999	486	1,005,428.0
2000	369	756,296.2
2001	351	218,113.9
2002	543	2,183,363.0
2003	476	602,717.9

Fire Activity by Landowner¹

Landowner	Number	Acres
U.S. Fish & Wildlife Service	22	309,509.1
State	70	178,219.0
Native Corporations	41	68,928.8
Bureau of Land Mgmt.	16	39,909.9
National Park Service	10	4,041.0
Military	10	963.3
Private	266	668.1
Bureau of Indian Affairs	3	455.6
USDA Forest Service	26	17.0
Boroughs/Cities	12	6.1
TOTALS	476	602,717.9

¹land ownership where fire began

Emergency Out-of-State Crew Use

Year	Crews	Year	Crews
1994	83	1999	11
1995	1	2000	73
1996	59	2001	20
1997	0	2002	25
1998	2	2003	29

Number of 20-person crews sent outside of Alaska to fight fires. Wages are paid by other states or suppression agencies.

Emergency Firefighter Wages

Year	State	Federal	Total
1996	6,778,022	4,273,774	11,051,796
1997	3,869,912	1,485,846	5,355,758
1998	2,734,442	1,897,356	4,631,798
1999	2,873,600	2,301,122	5,174,722
2000	4,434,380	3,734,483	8,168,863
2001	3,236,581	1,867,826	5,104,407
2002	6,002,237	2,999,461	9,001,698
2003	5,373,702	3,256,674	8,630,376
TOTALS	\$35,302,876	\$27,876,542	\$57,119,418

Causes of Fires on State-Protected Land

Cause	Number	Acres
Lightning	18	97,468.1
Slash burns	33	6,016.3
Trash burns	39	5,483.5
Land clearing	37	1,579.9
Other causes	63	720.6
Campfires	44	58.7
Powerlines	32	45.3
Field burns	9	37.9
Vehicles	18	28.2
Exhaust	3	21.1
Repelling wildlife	2	10.5
Burning dumps	4	2.8
Children	16	2.6
Burning buildings	17	1.9
Smoking	12	1.4
Fireworks	6	1.0
Row burning	4	1.0
TOTALS	357	111,480.6

2003 Fires by Area and Protection Level

State-Protected Areas										
Area	Critical		Full		Modified		Limited		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Anch/Mat-Su	124	107.6	19	56.5	0	0	0	0	143	164.1
Copper River	3	.3	8	23.9	1	0.1	0	0	12	24.3
Delta	36	44.0	2	.3	2	49,786.5	0	0	40	49,830.8
Fairbanks	63	67.0	8	1,900.6	0	0	3	845.0	74	2,812.6
Haines	4	0.5	1	0.2	0	0	0	0	5	0.7
Kenai/Kodiak	35	160.7	6	5.6	3	513.2	1	301.0	45	980.5
Southwest	1	1.0	16	6,219.8	0	0	3	531.0	20	6,751.8
Tok	5	0.6	10	5,616.2	0	0	3	45,299.0	18	50,915.8
TOTALS	271	381.7	70	13,823.1	6	50,299.8	10	46,976.0	357	111,480.6

USDA Forest Service-Protected Areas										
Area	Critical		Full		Modified		Limited		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Chugach N.F.	8	2.3	9	0.9	0	0	2	0.6	19	3.8
Tongass N.F.	0	0	21	33.8	1	0.1	2	2.0	24	35.9
TOTALS	8	2.3	30	34.7	1	0.1	4	2.6	43	39.7

BLM Alaska Fire Service-Protected Areas												
Zone	Critical		Full		Modified		Limited		Unplanned		Total	
	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Galena	3	7.8	5	25.4	8	2,499.9	19	46,740.2	0	0	35	49,273.3
Military	0	0	3	4.6	0	0	7	958.7	0	0	10	963.3
Tanana	1	2.5	3	5.3	0	0	6	39,316.1	0	0	10	39,323.9
Upper Yukon	3	11.5	4	1,574.3	0	0	10	340,191.3	4	59,860.0	21	401,637.1
TOTALS	7	21.8	15	1,609.6	8	2,499.9	42	427,206.3	4	59,860.0	76	491,197.6

Statewide Totals by Protection Level											
Critical		Full		Modified		Limited		Unplanned		Total	
No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
286	405.8	115	15,467.4	15	52,799.8	56	474,184.9	4	59,860.0	476	602,717.9

2003 Fire Season

Fire Activity

The 2003 fire season began with a national tragedy to which Alaska fire crews responded. Ten Alaska village crews traveled to Texas in mid-March to assist NASA with recovery operations after the space shuttle Columbia broke apart over the southwestern United States.

At about the same time, exceptionally strong winds and low humidity in southcentral Alaska created a fire situation never before seen in the month of March. Dating back to the mid-1970s, there had been an average of 1.37 fires in March. In 2003, 53 fires burned across the McGrath, Kenai, and Mat-Su areas. Most notable were the 127-acre Cottonfield Fire on the Kenai Peninsula and the 65-acre Helen Fire near Palmer. Firefighters battled minus 30-degree wind chills and frozen equipment along with the flames. The mobilization included Division of Forestry firefighters, four village crews, local fire departments from Palmer and Wasilla, and Alaska Fire Service smokejumpers and fire specialists.

Normal break-up conditions and fire activity returned in April and most of May. However, on Memorial Day weekend, Alaska's Type 2 Incident Management Teams were called to the Illiamna Lake Fire in southwest Alaska and the Rex Bridge Fire 75 miles south of Fairbanks. Just days later, Alaska firefighting resources were stretched to the limit when the Tok River Fire forced the evacuation of a subdivision and the mobilization of structure fire department engines from along the Alaska road system, a Type 2 Incident Management Team from Washington State and five hotshot crews from the Lower 48. Air tanker and helicopter support, so crucial to success in Alaska, was instrumental in attaining fire management objectives on all three incidents.

On June 14, Alaska initial attack forces were confronted with two problem

fires. The Ptarmigan Fire, north of Fairbanks, burned 400 acres before firefighters got the upper hand. The Sand Creek Fire, near Delta, burned nearly 50,000 acres over the next week and required mobilization of an Alaska Type 2 Incident Management Team. July fire activity was moderate and the season wound down in August as usual.

It is worth noting that on land protected by the State of Alaska, lightning caused five percent of the fires but accounted for 87 percent of the acres burned in 2003.

Several large fires burned in zones protected by the Alaska Fire Service. These included the Albert Creek Fire near Central, which was managed by the Type 2 Team, the 117,000-acre Erickson Creek Fire adjacent to the Alaska Pipeline north of Fairbanks, and the largest fire of the summer, the 193,000-acre Hadweenzic Fire, 50 miles west of Ft. Yukon.

By August, Alaska firefighters were fighting fires all across the northern Rockies and western states. Twenty-five Alaska village crews were sent to fires in Montana, California, and Idaho. For the first time since 1982, village crews crossed an international border as four were sent, through the Northwest Compact, to British Columbia during the most extreme fire season in western Canada in nearly a century. A Division of Forestry air tanker and PC-7 aircraft also spent six weeks assisting the Oregon Department of Forestry, once again through the Northwest Compact.

Alaska Type 1 Incident Management Team

Alaska's Type 1 Team had another in a series of busy years. The team spent 44 days assigned to four large fires in the Lower 48 between July 15 and September 6. Joe Stam was the Incident Commander and Lynn Wilcock was Deputy IC. AWFCG intends for Lynn to assume full Type I Team IC responsibility at the end of the 2003 season.

On July 15, the team traveled to its first fire in 2003, the Kinishba Fire in the Bureau of Indian Affairs' Fort Apache Agency protection area in Arizona. The fire eventually burned 24,500 acres. At the conclusion of the assignment on July 21, with fire activity increasing in many parts of the western U.S., the team was pre-positioned in Phoenix in anticipation of additional use.



NBC reporter Jim Avilla (left) interviews DOF Suppression Foreman Clinton Northway at the Roberts Fire in Glacier National Park (photo by Pete Buist).

The team was assigned to manage the 3,200-acre Roberts Fire in the Flathead National Forest in Montana on July 25. Extreme burning conditions forced the evacuation of many residents and the closing of several Glacier National Park facilities. The fire had burned 23,935 acres when the Alaska team reached the 21-day mark, concluding a very successful assignment. On the day that the team returned to Alaska, August 7, nine large fires were burning in the Northern Rockies.

Ten days later on August 17, with 39 large fires burning in the Northern Rockies, the Type 1 Team was sent to the 6,000-acre Craig II Fire in the BIA's Northern Cheyenne Agency

Statewide Fire Prevention and Enforcement

A large portion of the lands protected by the Division of Forestry share a growing wildland/urban interface fire problem as the number of homes and businesses built in forested lands adjacent to the road system and population centers increases. Humans cause approximately 85 percent of all fires within DOF's protection area, and 97 percent of the fires within wildland/urban interface areas. Fire prevention programs allow the division to educate the public about safe burning practices in order to reduce the number of human-caused fires. Fire investigation and enforcement actions allow the state to recover costs associated with fire suppression and serve as a deterrent to others who might practice unsafe burning.

Fire prevention education is one of the most effective tools for reducing these numbers. These programs include school presentations, appearances at fairs and other public gatherings, and public service announcements. In 2003, DOF employees made presentations at more than 80 schools, reaching 9,500 students and teachers. Presentations at parades, fairs, home shows, Firewise workshops and public service announcements carried the prevention message to a significant number of Alaskans.



Pete Buist working on a documentary along North Fork of Flathead River in Montana (photo by Jim Kinsey, TMTDV Productions).



Division Supervisor Tom Dean being interviewed for PBS documentary, A Year in the Life of Kalispel, MT. (photo by Pete Buist).

Burn permits are required from May 1 through September 30 and allow DOF to educate the public on a one-to-one basis about safe burning practices. They stipulate under which conditions a property owner can conduct burning. Permits are an effective means of reducing the number of human-caused fires and expensive false alarms. Burn permits are issued free of charge from Forestry offices, local fire departments, and on the Internet. The online application and burn permit program was initiated this year to great public success, particularly in the Mat-Su Valley where over 2,000 online permits were issued. In 2003, the division issued more than 8,000 permits. There were over 17,000 active permits because many are good for three years. Burn suspensions are managed on a daily basis depending on the fire danger.

When burning violations occur, written warnings or citations are issued that can result in a combination of fines, restitution of suppression costs, and public service or jail terms. A warning is a documentation of a violation. A citation is issued when a violation occurs and a fire requires suppression action, or a fire escapes. In 2003, the division issued 141 written warnings and 10 citations. Over \$443,000 in state suppression costs were recovered through a combination of criminal and civil restitution proceedings.

In the Northern Region both criminal and civil cases are being pursued for fires that burned during the 2003 fire season. The division has been successful in its aggressive efforts to recover costs for fires and expects two cases to settle with recovery of \$1.0 to \$1.2 million dollars. This type of cost recovery often takes a long time to complete; one of the settlements dates back to the 2001 Fish Creek Fire. The other case is from the Rex Bridge fire, 2003.

On the other side, the division is a defendant in a civil suit from the 2001 Red Fox Fire near Tok. A homeowner who lost a structure in this fire is seeking damages from the state. The division is working with the attorney general's office on this case, which is scheduled for trial in 2005.

The prevention message is one that all Division of Forestry employees incorporate into their daily interactions with the public during fire season. Homeowners are encouraged to make their homes as safe from wildland fire as possible. Programs such as Firewise were created to provide direction on safe development for communities and individual homeowners.

Anchorage Partnership

The division's Mat-Su District and the Anchorage Fire Department cooperated to operate a Type II helicopter based at Merrill Field in Anchorage. The partnership between the two agencies provides a strong mix of wildland and structural fire fighting expertise, which allows a rapid response to fires in the urban interface.

The Mat-Su fire crew worked on fuel mitigation projects on the Anchorage hillside for the third season. The season began on March 10, ended November 1, and included 126 work days. The crew completed projects in Bear Valley and Old Rabbit Creek, and in Hills, Forsythe, Birch, Shahlee, Kincaid, and John's parks. It also worked in Eagle River and McHugh Creek in Chugach State Park.

Forest technicians burned many of the brush piles created by the Mat-Su crew in the fall. All of the work was funded by a federal grant obtained by the Municipality of Anchorage for fuel mitigation projects.



Kenai emergency firefighter crew preparing to leave for a fire near Circle (photo by Ric Plate)

State Wins Miller's Reach Fire Lawsuit

The jury in the 1996 Miller's Reach Fire case returned a unanimous verdict in favor of the Division of Forestry and the State of Alaska in 2003. It concluded that the state was not negligent in fighting

the fire. State Attorney General Greg Renkes said,

The state is pleased with the jurists' verdict and thanks them for their service and commitment in hearing this lengthy trial. The state's vigorous defense demonstrates its determination to protect its ability to respond to natural disasters. Fighting a fire

is a big logistical challenge – like fighting a war. It is essential that firefighters be free to take appropriate action in light of their experience and expertise, based upon their evaluation of the situation at the time. The verdict lifts the shadow of this lawsuit, which has hung over the Division of Forestry since 1998. This is important going into this year's fire season. The verdict also recognizes that acts of nature like the wind gusts at Miller's Reach can overcome and overwhelm even the most experienced and best-trained firefighters in the world. Perhaps most important – the jury's decision in this case is an opportunity for the people affected by the fire to get beyond finger pointing, pull together as a community, and help those who suffered losses as a result of this disaster. The Division of Forestry will continue to work with local volunteer fire departments and local communities to educate the public on how to reduce the impact of wildland urban interface fires by the creation of defensible space around their homes.



Miller's Reach legal team (left to right): Kevin Donnelly, Attorney; Denise Berry, Paralegal; Dean Brown, Deputy State Forester; Scott Nordstrand, Deputy Attorney General; Tim Lamb, Lead Attorney; Delaney Wiles; John See, Forestry Liaison; Bill Estelle, Palmer District Attorney.

For many who were directly involved in the trial, Tim Lamb was their hero. A local "boy" who went to West High in Anchorage, Tim was the lead attorney from the firm hired by the Attorney General's Office and pitted against the same Minnesota law firm that represented Exxon in the Valdez oil spill lawsuit.

Tim was totally focused on winning and spent months working with many in the division – **Mark Bertels, Norm McDonald, Lynn Wilcock, Chris Olson, Greg Scully, John See, Cindy Forrest-Elkins, the Mat-Su forest technicians** and too many others to individually name. The forestry professionals who spent long hours on this case deserve credit for its success.



(left to right) Joe Stam, Chief of Fire; Phil Blydenburg; Greg Scully; Norm McDonald; Dawn Follett; Kevin Donnelly, Attorney; Pat Winn; Mark Bertels; Tim Lamb, Lead Attorney; Denise Berry, Paralegal; John See; Cindy Forrest-Elkins.



(L to R) Bill Beebe, Greg Scully, Lynn Wilcock, John See, Division of Forestry fire managers at the Miller's Reach Fire Trial. (photo reprinted with permission from the Frontiersman)



Lead Attorney Tim Lamb, with the law firm of Delaney, Wiles, Hayes, Gerety, Ellis, and Young (photo reprinted with permission from the Frontiersman)

National Fire Plan & Wildland/Urban Interface Projects

The National Fire Plan was adopted in 2000 to provide grants to states, some on a competitive basis, to reduce the threat of fire in wildland/urban interface areas. Funds are also available for wildfire prevention and education programs, mitigation, capacity building, and homeowner and community assistance. The Division of Forestry continues to implement the National Fire Plan by supporting a variety of educational and mitigation projects, such as those described below.

Moose Pass & Crown Point Fuels Removal. Bark beetles severely impacted the forest around Moose Pass and Crown Point on the Kenai Peninsula in the 1990s, increasing the risk of wildland fire around these communities. In 2003, dead spruce were removed from 606 acres, with priority given to forests near homes and infrastructure such as electrical power lines, the railroad, and the Seward Highway. Dead spruce were removed and debris was burned or mulched on approximately 80 percent of the project. Natural revegetation had begun to return by late summer.

Little Chena Fuel Management. The Little Chena Fuels Management Project will help protect residents from wildfire by removing fuels and changing the vegetation type on public lands. Shear blading will be done in the winter to create a firebreak and piles will be burned as weather permits and resources are available. The Alaska Department of Fish and Game has contributed funds to this project.

Fire and Fuels Mapping in Fairbanks. Work continues on fuel maps used in computer models of how fire will spread under different conditions. This allows fire managers to plan appropriate mitigation and fire suppression tactics for specific locations. Maps created by this project are being used to plan the Little Chena hazardous fuels management project.

Cache Creek. The Division of Forestry and the University of Alaska are working on research plots to determine how to convert a flammable vegetation type, such as black spruce, to a less flammable type such as birch.

Delta. The Division of Forestry and the Department of Transportation are providing a place for the public to bring slash from fuels reduction efforts around their homes and on other private property. DOT helps consolidate the slash piles and DOF employees burn them. This service helps homeowners reduce their wildland fire risk.

Prince of Wales Fuel Mitigation. Planning is under way to reduce hazardous fuels on Prince of Wales Island. The division will prepare and lay out the areas where hazardous fuels will be removed. Contracts will be awarded in late spring and the work will take place during the summer of 2004.

Private Land Fuel Removal. The division's Forest Stewardship Program administers cost share contracts to reduce fuels on private land near Houston, Nikiski, Meadow Lakes, Big Lake and communities within the Fairbanks North Star Borough.

Project Learning Tree's *Fire in Alaska*. *Fire in Alaska* is a wildland fire education program. Since 2001, 122 educators and community members have completed the 15-hour course in seven workshops. The National Park Service, Bureau of Land Management, U.S. Fish & Wildlife Service, and Kenai Peninsula Borough have purchased teaching materials, donated staff time, and helped fund the continued development of the program. The three major content areas of the curriculum, fire ecology, fire behavior, and safety in the wildland-urban interface provide teachers with an exciting, interactive way to teach across the curriculum. At the same time, it fulfills a vital mission of the division.

Grants funded development and piloting of an online version of this popular course in 2003.

Firewise Workshop. A federal National Fire Plan grant funded a Firewise Community Workshop in Fairbanks in May. Fifty-five participants from rural interior villages and the urban interface areas of the state attended the workshop, which focused on being prepared before fires.

Fairbanks Defensible Space. Division staff in Fairbanks distributed door hangers and made personal contacts to educate homeowners about the need and requirements for defensible space. Nearly 100 door hangers were given away and many public contacts made at the Firewise workshop. Hangers were also distributed in subdivisions outside fire department service areas. The door hanger and defensible space program will focus on homes within fire department service areas in 2004.

Anchorage Prevention & Education. The Division of Forestry, Anchorage Soil and Water Conservation District, Municipality of Anchorage, and other state and local agencies are coordinating to deliver a public education program in Anchorage. In 2003, the grant funded TV public service announcements and the distribution of Firewise informational packets to increase public awareness about the dangers of fire.

Initial Attack Firefighters. NFP funding enabled the division to hire and train 20 permanent initial attack firefighters in Palmer, Fairbanks, Soldotna, Delta, and Tok. These firefighters improve initial attack capabilities by the state, local government, and volunteer fire departments in the urban interface areas. Effective initial attack of a fire reduces overall suppression costs and minimizes threats to private and public property from wildland fire.



(left to right) Chris Andersen, Alex Strawn, and Greg Scully, Mat-Su initial attack forest technicians). (photo by Dean Brown)



Gary Hiller, an emergency fire fighter driver for Northern Region Logistics who has worked for Forestry many years. (photo by Dean Brown)

Grants to Rural Volunteer Fire Departments

The Volunteer Fire Assistance Program provides funds to increase firefighter safety, improve the fire fighting capabilities of rural volunteer fire departments, and enhance protection in the urban-wildland interface. The funds come through the U.S. Forest Service and are administered by the Division of Forestry.

In 2003, the VFA Program provided \$110,000 for rural fire departments. Additional State Fire Assistance funds brought the total available to \$157,714. The division received 37 requests for equipment, training and prevention activities and funded 35.

Volunteer Fire Dept.	Award
Anaktuvuk	\$5,000
Anchor Point	3,347
Atqusuk	5,000
Barrow	5,000
Bear Creek Fire Service	5,000
Bethel	4,950
Big Lake	5,000
Chena Goldstream	5,000
Delta Junction	5,000
Dillingham	5,000
Eagle	5,000
Ester	2,042
Greater Palmer Consolidated	5,000

Homer	5,000
Houston	5,000
Kachemak	4,446
Katovik	5,000
Kalwock	5,000
Meadow Lakes	5,000
Ninlchick	2,600
Nome	4,325
North Pole	5,000
North Star	5,000
Nuiquist	5,000
Petersburg	5,000
Point Hope	5,000
Point Lay	5,000
Sapa	5,000
Seward	1,169
Steese	5,000
Tok	5,000
Wainwright	5,000
Whittier	2,350
Willow	5,000
Women's Bay	2,485
TOTAL	\$157,714

State Fire Warehouse System

The State Fire Warehouse System operates out of facilities in Fairbanks and Palmer. With an inventory valued at over \$7 million, the warehouse provides support for initial attack in wildland/urban interface areas protected by the Division of Forestry. The warehouse

system also supports local government cooperators and federal cooperators in Alaska, the Lower 48, and Canada.

In 2003 the warehouse system:

- Issued supplies to over 130 fires in Alaska and Canada.
- Shipped eleven 48-foot vans with over 300,000 pounds of supplies and equipment.
- Provided wildland firefighting supplies and equipment valued at \$5,223,662, including \$86,000 of equipment issued directly to British Columbia fires.
- Issued supplies and equipment in support of Lower 48 fires with a total value of \$3,202,884.

Federal Excess Personal Property Program

The Federal Excess Personal Property Program provides equipment and supplies for wildland fire fighting in Alaska. The division also assigns FEPP equipment to cooperating volunteer and structural fire departments. The division tracks more than 175 types of federal property, including vehicles, generators, and a wide variety of supplies and equipment.

In 2003, the division put into state service a Ford crew cab truck, a flatbed truck with a lift gate, a 4x4 truck, and two forklifts. It also acquired, and made operational a versatile Bombardier fire fighting ATV and rebuilt a 1967 fuel truck and put it into service at the McGrath station.

Scott Christy, the division's primary screener of FEPP equipment, retired in September. He leaves a legacy of equipment being used by structure fire departments throughout the state. The division has one of the most complete and accurate inventories of FEPP equipment in the country. It has acquired and distributed more than \$6.5 million worth of Federal Excess Personal Property since the program's inception in 1971.



Janey Wininger, Chief of Staff for Senator Lyda Green, with Brian Carver, Forest Technician III Mat-Su initial attack.

Aviation Program Highlights

Evergreen Helicopters of Alaska provided seven contracted helicopters located in Tok, Delta, Fairbanks, Kenai, Anchorage, Palmer, and McGrath. These rotor craft are essential in responding to fires quickly and suppressing them at a small size. The Anchorage Fire Department funded one helicopter for a 66-day period during high fire danger in the Anchorage Bowl. These helicopters flew a total of 549.1 hours.

The division continues to operate two leased Pilatus PC-7s, a Federal Excess Property Program DHC-2 Beaver, and an Aero Commander, which are used to provide safe aircraft separation, coordination, and cargo/personnel transport for wildland fires. These aircraft flew a total of 420.9 hours

During the fire season, the division also contracted for three air tankers. Hawkins & Powers, of Greybull Wyoming, provided the KC-97 for the last year of a five-year contract. Conair provided two Douglas DC-6s for the first year of a five-year contract. The air tankers flew for 228.5 hours.

The State of Oregon requested, through the Northwest Compact, the use of an air tanker and PC-7 from the State of Alaska from July 26 until September 15. Oregon reimbursed the state for all costs during this period.

The aviation program also worked with the Alaska Army National Guard to make flight crews, helicopters, and other aviation resources available in the event of a disastrous wildfire. The division coordinates with the military on agreements, training, and other preparations prior to fires so that they are able to efficiently protect public and private resources from wildfire.



Norm McDonald, Mat-Su Area Forest Tech IV, initial attack foreman, with Janey Wineinger, Chief of Staff for Senator Lyda Green. (photo by Dean Brown)

Satellite Imagery and GIS

Wildfire Protection Planning. The Division of Forestry initiated the imagery/mapping project through a 2001 \$600,000 grant from the National Aeronautics and Space Administration (NASA). After extensive comparison, the division acquired QuickBird satellite imagery from DigitalGlobe.

This project provides ortho-rectified imagery to display and develop data, map vegetation, and create a database of fuel models. The fuel map allows the division to identify fire-prone areas for fuels treatment, fire pre-attack planning, and to predict fire spread so threatened subdivisions can be evacuated. The high resolution provides firefighters with clear visualization of structures, roads, trails, fuel types, water sources, and escape routes. The geospatial data supports flood assessment and control measures and hazardous material spill responses.

The Tanana Valley, home to Fairbanks and scattered rural communities, was a high priority for the project because of its history of wildfires and lack of adequate mapping. In the last decade wildfires consumed valuable resources and threatened and destroyed property and homes. The division contracted with DigitalGlobe in 2002 to collect 1,500 square miles of image data for the Tanana Valley including 100 square miles around each of the 15 villages. DOF also contracted with Spot Corp. for 15,000 square miles of the valley containing important resources.

Community Fire Planning. DOF worked with DigitalGlobe to collect imagery of the Fairbanks and North Pole areas for Community Fire Planning Using GIS, a project funded by the National Fire Planning Initiative. Images collected in 2002 and 2003 encompass 800 square miles surrounding Fairbanks.

In May 2003, the data were used to fight wildfires in forested areas 80 miles south of Fairbanks. Firefighters used QuickBird imagery to determine the locations of threatened structures, evacuation routes,

and areas where firefighters were needed. The digital images replaced outdated, inefficient quadrangle paper maps. Large printouts were used for fire personnel briefings and smaller copies on the fire line.

In future initial attack, DOF will use the imagery to determine the location of fire line construction, trails that a light fire engine can navigate, and escape routes for firefighters. The division will add power line coverages to help locate fire threats to power lines, cut off electricity, and to protect firefighters.

The key is getting the imagery into the field where it is needed. Firefighters don't have to be GIS experts to use the data they just need access to the data and imagery. ArcPad is an easy way to provide the access. With imagery in the background and linked to GPS, any doubt about location on the fireline is eliminated. The same configuration is used to map fire boundaries.

In summer 2004, DOF will field test laptops, personal digital assistants, and Tablet PCs integrated with GPS and loaded with compressed imagery, GIS coverages, and ArcPad to improve response time and structure identification in thick smoke. With a fire protection area of eight million acres and relatively few roads, it is inefficient to send 100 USGS quad maps with initial attack firefighters. DOF will use Arc Pad and GPS to map important features, such as water sources for helicopter bucket operations or engines.

Digital Maps Support Services for Remote Villages.

In addition to its benefits to the Division of Forestry, the NASA project has other beneficial applications:

- Mapping of sewer, water, power, and structural locations and sources,
- Mapping of roads and access trails,

- Aviation safety, airstrip inventory, and airstrip approach information,
- Public safety support for villages, safety officers, and Alaska State Troopers. For example, state troopers used the high-resolution imagery to search for a lost elder near Tetlin.

The Fairbanks North Star Borough is using the imagery in its land records website. Golden Valley Electric Assn. and Golden Heart Utilities use the data for field operations. DOF will put imagery and GIS coverages on its website for use by other agencies and the public.

Cooperating agencies include the Alaska departments of Environmental Conservation, Fish & Game, and Transportation; the Alaska State Troopers; City of Fairbanks; Fairbanks North Star Borough; Golden Heart Utilities; Golden Valley Electric Assn.; Tanana Chiefs Conference; UAF; U.S. Department of Agriculture Natural Resources Conservation Service; and nearly 20 fire departments.

Fairbanks Area staff members Marc Lee, Gordon Worum, Bill Johnson, and Dave Burns can provide information on this project.



Bill Johnson, Fairbanks Area GIS mapping expert.
(photo by Dean Brown)

Fire Program Training

The division provides training to maintain a safe and qualified workforce, ready to respond to wildland fires and other emergencies as needed. Interagency courses are open to structure fire departments, local governments, and emergency firefighters, other geographic areas, and Canadian agencies that cooperate with the state.

National Level Training

National level training helped the division meet the need for qualified, advanced level personnel to serve on Alaska's Incident Management Teams, stay abreast of national advances in logistics, fire leadership, aviation, fire behavior, and fire support.

Forestry employees and/or cooperators attended the following courses in 2003:

- S-620 Area Command
- S-520 Advanced Incident Mgmt.
- S-360 Finance/Admin. Unit Leader
- S-460 Finance/Administration
- Section Chief Fire Mgmt. Leadership
- S-492 Long-term Fire Risk Assessment
- S-378 Air Tactical Group Supervisor
- National Equipment Workshop
- National Aerial Firefighter Academy
- D-310 Support Dispatcher
- National Logistics Workshop
- S-403 Information Officer
- S-359 Medical Unit Leader

The division made advances in training personnel to fill Type 1 and Type 2 Incident Management Team positions.

Instate Training

The division and its cooperators provided 45 fire courses to 501 students for 1,064 hours of training at the statewide level. Area offices provided additional training in Basic Firefighter, Fire Line Safety, entry-level suppression skills, prevention, first aid, and hazardous materials.

Core suppression skill courses such as Fire Operations in the Interface, Crew Boss, Engine Boss, Fire Behavior, Incident Commander Type 3, Task Force/Strike Team Leader, and Division Supervisor were offered on a statewide basis. Aviation training in aerial firing, helicopter manager and helicopter crewmember courses were offered. New developments in time keeping using the Incident Time System computer program were presented statewide. Dispatch classes, including the Alaska Dispatch Workshop, Dispatch Recorder, Resource Ordering Statusing System (ROSS) were conducted to increase the available pool of dispatchers trained in the new ROSS system. Courses in Ground Support, Information Officer Type 3, Methods of Instruction, ICS, and Hazardous Materials were also conducted.

Alaska crew boss training was held on an interagency basis for Type 2 village crews. Division crew bosses from Fairbanks, Nikolai, Hooper Bay, Nondolton, Northway, and Lower Kalskag attended the training.

Fire Department & Local Government Training

Statewide, 36 fire department personnel and 4 Alaska Division of Emergency Services personnel were certified in fire overhead positions. The Anchorage fire department had 256 personnel certified as Basic Firefighters. Statewide, many other fire department employees were certified as Basic Firefighters. Fire Departments received training in Basic Firefighter, Fire Line Safety, Advanced Firefighter, Wildland Fire Cause and Prevention from the area offices. Statewide, fire departments were provided with Fire Behavior, Dispatch, Helicopter Manager/Crewmember, Finance, Information, Fire Operations in the Interface, Crew Boss, Engine Boss and Plans training.

Statewide, 636 fire department and local government employees attended 54 fire training courses for 652 hours of training.

Structural fire departments across the state assist the division in fire suppression in populated areas through cooperative agreements. These cooperators are a valuable source of trained, experienced firefighters. The division offers evening and weekend courses to meet the training needs of volunteer fire departments.

Tazlina Hotshots

The division continues to provide training to the Tazlina Hotshots. Nine students attended three courses for 112 hours of training. The Tazlina Hotshots are a highly trained crew available to fight the most complex fires.

Ray Shinn, Tazlina Hotshots founder, died suddenly on October 28. Ray worked as a Forest Technician for the Copper River Office in the 1980s and started the Tazlinas Type II crew. He persevered through financial adversity, a series of native corporation sponsorships, turnover in crew bosses and crew supervisors, and training and qualification issues until he brought the crew to a level the state could certify

as a Type I crew – the beginning of the Tazlina Hotshots.

Ray was politically astute at both the state and national level in advocating for the Tazlina Hotshots. He never gave up on improving the crew and getting resource work assignments, in addition to fire assignments.

A memorial tree planting was held in Wasilla at the Central Mat-Su Emergency Service building. Ray's wife, Dorothy, and family from across the state attended along with forestry personnel who had worked with Ray.



Memorial and tree planting for Ray Shinn, founder of Tazlina Hotshots. Mrs. Shinn is in the white jacket. Family members are to the left and Mat-Su Forestry Technicians flank Dean Brown and Matt Weaver at far right. (photo by John See)



Dean Brown, Deputy State Forester, (second from left) gave memorial recognition for Ray Shinn. (photo by Matt Weaver)

Training in 2003

Type of Course	Courses	Participants	Hours
Incident Command System	2	44	7
Basic Firefighter	16	498	416
Fire Management	7	66	164
Dispatch	4	34	168
Suppression Skills	38	520	664
Prescribed Fire	1	3	24
Alaska Crew Boss	1	12	104
First Aid/CPR/BBP	8	91	74
Fire Line Safety	64	1,488	74
Hazardous Materials:			
Warehouse	3	28	40
First Responders	4	57	22
Other	5	64	40
TOTALS	153	2,905	2,009

Chart includes training sponsored by the division statewide and other training attended by division and cooperating fire department personnel. It includes emergency fire-fighter crews and participants from other agencies. Chart does not contain data from the Southwest Area.

Lower 48 Training (included in chart above)

Type of Course	Courses	Participants	Hours
Fire Management	5	9	200
Suppression	6	7	208
Dispatch	2	2	72
TOTALS	13	18	480

Interagency Fire Training Courses

Alaska Crew Boss
 Alaska Dispatch Workshop
 Canadian Forest Fire Danger Rating System
 Dispatch Recorder
 Fireline Safety
 Forklift Training
 Hazardous Materials Transport
 Helicopter Manager Workshop
 Military Helicopter Manager
 Helicopter Standardization
 Incident Time System
 Introduction to ICS
 Methods of Instruction
 Aerial Firing (Premo)
 Resource Order Statusing System
 Prescribed Fire
 Information Officer Type 3
 Fire Operations in the Interface
 Engine Boss
 Incident Business Management
 Interagency Helicopter Training
 Intermediate Fire Behavior
 Incident Commander Type 3
 Crew Representative
 Task Force/Strike Team Leader
 Division/Group Supervisor
 Situation Unit Leader
 Ground Support Unit Leader
 Helicopter Manager
 Fire Behavior Calculations

Employee Recognition

25 Years of State Service



Wade Wahrenbrock

Wade became a Department of Natural Resources employee in the spring of 1977 and has worked his entire career at the Division of Forestry's Kenai-Kodiak Area.

Wade began his career as a seasonal crewman in the initial attack fire program. Early in the 1977 fire season, he was promoted to area foreman and in 1979 his position was made full-time. As area foreman, his summer seasons were geared toward wildfire suppression and managing the area fire crew. During winter, his focus shifted to the resource program. Wade managed the personal use firewood and house log program as well as assisting in preparation of commercial timber sales.

In 1984 Wade was promoted to Forester I and began working full time in the area's forest resource management program. In 1988 he was promoted to Forester

II. Wade was reassigned to the forest practices program two years later, which remains his current job. Through the years, Wade has continued to participate in the fire program, usually as a Fire Behavior Analyst.

In his spare time, Wade enjoys experimenting with the adaptability of tree species in Alaska. Wade also enjoys woodworking and favors crafting cabinets from Alaskan hardwoods.



Wallis Brockert-Hoff

Wallis "Wally" Brockert-Hoff started work with the state in 1978. Wally began her long career in State Procurement as an expeditor for the Supply Department of the McLaughlin Youth Center in the Department of Corrections. As a Procurement Specialist for McLaughlin (then in the Department of Health and Social Services) Wally was an

integral player in more than six large construction and expansion projects. She worked with engineers, contractors, and DOT project planners in the design, development, security, and outfitting of various juvenile correction facility additions.

After 23 years at McLaughlin, Wally accepted the position of Procurement Specialist with the Division of Forestry in 2001. She deals with all aspects of acquisition for Forestry's operational supplies, services, and equipment. In addition to the wealth of experience she brings to Forestry, her most valuable contribution is her expert ability to work with staff to translate their operational needs into acceptable procurement specifications.

Wally is a snowmobile enthusiast and avid camper at her family's weekend getaway in Petersville. She and her

husband, Steve, also enjoy the significant maintenance of their menagerie of three goats, two sheep, two dogs, two cats, one horse (and the next four-legged critter that will come along needing Wally's help).

20 Years of State Service



Steve Joslin

Steve is an Iowa State University graduate with a B.S. in Forest Management. Previous employment included forestry jobs in Polk County, Iowa, the U.S. Forest Service in Denver and Leadville, Colorado, the BLM in Roseburg, Oregon and the USFS in Thorne Bay, Alaska. He began his career with the Division of Forestry as a Forester II in the Haines Area Office. While working in the Haines

Area, Steve's work duties included sale and road layout, sale administration, reforestation, and participation in the Haines State Forest Planning process.

Steve transferred to the Delta Area Office in June 1985. When he arrived in Delta, he was given a tour of harvest activities and kept asking, "Where are the merchantable trees?" Having just left Haines, he had to adjust his scale of "merchantable size timber." He has adapted to the Delta area and continued to develop the Resource Program. Due largely to the consistent supply of timber volume from state timber sales, the local timber industry has modernized woods operations and mill sites. The two largest operations have acquired mechanized felling equipment, log processors, a modern mill operation, and dry kilns. The local industry has had a steady growth through Steve's tenure.

Steve has been involved in several notable projects:

- Timber harvest of between one and five million feet annually
- Sales designed to maximize natural regeneration
- Contract tree planting
- All-season and winter road development
- Update of Tanana Basin Area Plan
- Update of the Tanana Valley State Forestry Plan
- Development of Region III Riparian Standards
- City of Delta Junction tree planting
- Initial attack on local fires
- Retardant site manager
- Support of extended attack fire activity with maps, aerial photos and other GIS products



Gary Reabold

Gary Reabold left Pennsylvania for Alaska in 1974, where he spent his first year in the village of Tanana on the Yukon River and served on the Tanana EFF crew. He later worked on pipeline construction and attended UAF, where he earned his Resource Management

degree in 1977. Gary's career with DNR began in 1978 when he was hired as a Park Technician for the Division of Parks at Kodiak. The next summer he was hired as a Forest Technician III in the Fairbanks Area, the year of the first Delta Barley Fire.

In 1981, Gary became Crew Foreman for Fairbanks Area. Gary remembers that in those days, the engines were surplus 10-yard dump-trucks from DOT with slip-on units. Firefighters were issued a bug net, a file, and a piece of Visqueen and sent out on a 3-week assignment.

Gary transferred to the division's Resources Program in 1989. He worked as a road engineer and as the forester in charge of the firewood program. Gary instituted a computer-aided road design program that automated cut and fill calculations and plotted contract plan and profile sheets. His innovations saved

a tremendous amount of time over the previous methods.

In 1985, Gary acquired a U.S. Forest Service grant for wood bridges. The Fairbanks area used the \$50,000 to construct a 64-foot span wooden bridge using local wood products and impressive new technology. The University of Alaska, in cooperation with DOF, designed the bridge and tested a new wood preservative on the white spruce boards on the running surface.

Gary has also been the driving force behind the construction and placement of seven new bridges in the Fairbanks area, the most recent being the Cache Creek Bridge placed in the fall of 2003. Gary has remained active in the fire program in various operations positions.

15 Years of State Service



Glen Holt

Glen is a second-generation forester from Wisconsin and Michigan. Following in his father's footsteps, Glen earned BS degrees in Wildlife Management and Forestry from Michigan State University. Glen has worked for his dad in consulting forestry, and for the Michigan DNR,

the Forest Service in Idaho, the Idaho Fisheries Cooperative Research Unit, the Alaska Department of Fish & Game, as a consulting forester in Southcentral and Interior Alaska, and as an emergency fire fighter.

Glen has worked for the Division of Forestry since 1985. He started as a Forest Technician II and progressed over the years to Forest Technician III Engine Foreman, Forest Technician III Fire Prevention, Forest Technician IV Fire Prevention/Forest Warden, Forester I Stewardship Forester, and Forester II Stewardship Forester. For the past two years, Glen has worked as the Mat-Su/Southwest Area Resource Forester.

Since moving to Alaska in 1982, Glen has homesteaded in the Skwentna Area and worked as a hunting guide since 1991. In addition to his job, Glen enjoys hunting, fishing, wilderness rafting trips, and guiding. Glen especially likes king salmon fishing with his wife, hunting with his stepson, and rock picking with his stepdaughter.



Chris Olson

Chris joined the Division of Forestry in 1982. He brought experience gained from eight summers of fighting fires for the BLM and U.S. Forest Service in Alaska, and four winters of harvesting timber in Montana.

His first job with the Division of Forestry was a three-month stint as a Forest Technician III doing regeneration surveys in Tyonek, after which he accepted an engine foreman position with the Mat-Su Area. In 1984, Chris

became Mat-Su's first area dispatcher and helped Bill Plate build the dispatch program from scratch. In 1985, he accepted a job in Southcentral Region Logistics, and in 1989 became the Intern Program Manager for Mat-Su Area. In 1992, he took his present position as Fire Prevention Officer for Mat-Su Area. Five years later, the role of area training officer was added to his duties.

In 1997 Chris was instrumental in forming the Mat-Su Valley Fire Prevention Cooperative, a joint effort in both structural and wildland fire prevention by Mat-Su Borough fire departments and the Division of Forestry. Chris has instructed numerous courses in fire behavior, fire ecology, biology, and biodiversity for fire program professionals and in the high school and college setting.

Chris spends his time away from the job raising a family, coaching youth hockey, and in trying to turn a hobby farm into a profitable situation so that he may retire before the age of 80.

15 Years of State Service



Dale Anderegg

Dale began his career with the Alaska Division of Forest, Land & Water Management in 1979 as a Forest Technician III, engine foreman, and ATV operator for the newly created Kenai-Kodiak Area. Before coming to Alaska, Dale received an AAS-Forest Technology degree at Ely, Minnesota. He worked five seasons with the

Minnesota DNR as a forest technician/firefighter in the summer and groomed snow machine trails in the winter. Dale also gained initial attack fire experience and was assigned to fires in Idaho and California. Dale has the distinction of working on Minnesota's first helitack crew.

Dale led a basic wildland firefighting course each spring at the AV-Tech Forest Technology program in Seward for 10 years. He teaches basic firefighting, LCES refresher, and helicopter courses for volunteer fire departments, emergency firefighters, and forest technicians.

In 1984, Dale switched from engine operations to helitack where he continues to work as the Kenai-Kodiak Area's lead helicopter manager. He has held numerous fireline and aviation red card positions working on fires in Alaska, the Yukon, and Lower 48. Recently Dale decided to focus his expertise in the

helicopter program. He is also qualified to operate the helitorch and Premo Mark III aerial firing devices.

Besides working on helitack Dale has participated in search and rescue, flown cabin materials to remote building locations for the U.S. Forest Service, flown wildlife biologists on animal surveys, and done promotional aerial filming of Prince William Sound. Dale's most memorable mission was lighting a 1,000-acre burn-out on a 14,000-acre grass fire on Kodiak Island with just two other firefighters.

During his off season Dale enjoys cross country skiing, snowmobiling, grooming trails, and other outdoor activities.



Larry Dorshorst

Larry began his career with the Bureau of Land Management in Delta Junction as an Emergency Fire Fighter in 1969. In 1970, the BLM hired Larry as a seasonal fire lookout on top of Shaw Creek Dome. Larry continued to work seasonally with the BLM as a retardant site worker and warehouse system manager for Delta, Chicken, Tanacross, and Eagle.

Larry began his career with the Division of Forestry in 1978 when George Fortier said he heard Larry was a hard worker and asked if he wanted a job with the state. Larry went to work as a Forest Technician III the next day. He was promoted to a Technician IV Area Foreman in Delta Junction, which he has held for the last 16 seasons.

Larry's accomplishments include:

- Operations Section Chief on numerous Type II fires
- Safety Officer on the Type II and Type I Teams
- Extensive experience in timber cruising
- Laying out timber sales and roads.

Larry has many irons in the fire. He occupies his spare time by farming an 80-acre farm of his own as well as 150 acres of other farmland. He owns his own

saw mill and logging operation, traps a 100-mile trap line and owns three rental cabins. During the summer months, he runs a historical museum for tourists. The museum focuses on the early days of farming, logging, and mining in Alaska.

Larry married his wife, Juliet, in October 2000 and they are the proud parents of a son born in April 2003.



Sue Christensen

Sue began her career in the fire program in 1973 in a BLM warehouse and moved to a seasonal position in training in 1977. She left BLM for a Division of Forestry position in 1979, where she worked as a detection lookout, an Engine Crew Leader, Helitack Crew Leader, and in fire prevention, timber and logging sales, and in the Fairbanks Area warehouse.

Sue received Finance Chief training in 1983 and was assigned to an Alaska Type 2 Incident Management Team. She worked as a Fairbanks Area dispatcher for three years beginning in 1986 before being promoted to the Lead Dispatcher position, which she held until 1996. That year, she moved to the Alaska Interagency Coordination Center at Fort Wainwright as the state's Intelligence Coordinator. In 2000, Sue went to Montana with five Alaska crews as a Crew Administrative Representative.

In 2002, she was promoted to Lead Intelligence Coordinator at the AICC. Sue has taught Wildland Incident Business Management classes at the University of Alaska Fairbanks each fall semester since 1988.

Alaska Board of Forestry

Adrian LeCornu, ANCSA corporation,
Hydaburg
Christopher Stark, non-governmental
fish or wildlife biologist, Fairbanks
Larry Hartig, recreational organization,
Anchorage
Jeff Jahnke, State Forester, Anchorage
John DeMarchi, mining organization,
Fairbanks
Craig Lindh, non-governmental
forester, Juneau
Rick Smeriglio, environmental
organization, Seward
Rick Rogers, forest industry trade
association, Anchorage
Bill Oliver, commercial fishermen
organization, Kodiak

Alaska Forest Stewardship Coordinating Committee

Ole Andersson, landowner, Soldotna
Steve Bush, USDA Forest Service,
Anchorage
Jeff Graham, Alaska Division of
Forestry, Palmer
Mike Green, Alaska Association of
Conservation Districts, Fairbanks
Doug Hanson, Tanana Chiefs
Conference, Fairbanks
Max Huhndorf, Gana-A' Yoo, Ltd.,
Galena
Jimmy LaVoie, USDA Farm Service
Agency, Palmer
Allen Leman, landowner, Kasilof
George Matz, The Audubon Society,
Anchorage
Daryl McRoberts, forest industry
Representative, Wasilla
Mitch Michaud, USDA Natural
Resources Conservation Service, Kenai
John Mohorcich, Kenai Peninsula
Borough, Soldotna
Erica Reith, USDI Bureau of Indian
Affairs, Juneau
Bob Wheeler, Cooperative Extension
Service, Fairbanks

Alaska Community Forest Council

John Alden, member-at-large,
Fairbanks
Monique Anderson, landscape
architect, Anchorage
James DePasquale, construction/
right-of-way seat, Homer
Tom Hines, industry/business, Homer
Ann Lawton, horticulture, Eagle River
Sue Lincoln, Cooperative Extension
Service, Anchorage
Thomas (Pat) McArdle, arborist,
Fairbanks
Michael Rath, forester, Anchorage
Denise Saigh, municipal planner seat,
Anchorage
Rebecca Schwartz, member-at-large,
Wasilla
Peter Simpson, small community
service, Ester
Corinne Smith, community forestry/
beautification, Anchorage
Sondra Stanway, member-at-large,
Juneau
Warren Templin, member-at-large,
Palmer
Dave Wolfe, member-at-large,
Anchorage

Tanana Valley State Forest Citizens' Advisory Committee

Tricia Wurtz, Chair, forest science
Jerry Gustafson, forest industry
Brad Cox, value-added processing
Chris Stark, environmental interests
Vacant, private forest user
Jim Ostlind, recreation
Vacant, tourism industry
Dave Payer, fish and wildlife interests
Curtis Freeman, mining industry
Edna Hancock, Native community
Vacant, Upper Tanana Valley
representative
Vacant, Lower Tanana Valley
representative

Fiscal Year 2003 Actuals

Funding Sources	Forest Mgmt. & Development	Fire Suppression	Emerg. Firefighters Non-emergency	Totals
General Funds	\$6,561.0	\$27,412.8	---	\$33,973.8
Federal Funds	958.8	12,220.6	---	13,179.4
Capital Improvement Receipts	612.9	---	377.4	990.3
Interagency Receipts	1,557.0	549.7	---	2,106.7
Timber Receipts	520.6	---	---	520.6
Other	16.2	---	---	16.2
TOTALS	\$10,226.5	\$40,183.1	\$377.4	\$50,787.0

Positions

Permanent Full-time	63	10	---	73
Permanent Part-time / Seasonal	118	74	---	192
Non-permanent	12	---	---	12
TOTAL POSITIONS	193	84	---	277

Forest Management & Development Component

Renewable Resource Development & Sales	Coastal Region	Northern Region	Statewide	Totals
Forest Management	\$841.8	\$1,099.8	\$259.7	\$2,201.3
Forest Practices	299.2	---	16.4	315.6
Board of Forestry	---	---	20.7	20.7
Capital Improvement Receipts	9.2	122.4	53.8	185.4
State Designated Program Receipts	---	---	16.2	16.2
Interagency Receipts	246.7	60.9	6.5	314.1
Federal Cooperative Forestry Assistance	105.2	---	482.8	588.0
Subtotals	1,502.1	1,283.1	856.1	3,641.3

Wildland Fire Protection Services

Anchorage School District Interns	51.8	---	---	51.8
Preparedness	2,047.3	1,837.2	369.6	4,254.1
I.A. Rcpts. Fed. Fire Suppression Sup.	---	---	726.7	726.7
I.A. Rcpts. Emergency Svcs. Support	---	---	177.2	177.2
I.A. Rcpts. Other	---	---	290.7	290.7
CIP Rcpts. State Desig. Program Rcpts.				
Fuels Mitigation & Fire Prevention	229.4	---	---	229.4
CIP Receipts - Other	6.9	149.6	41.6	198.1
Federal Cooperative Forestry Assistance	22.0	37.0	311.8	370.8
Subtotals	2,357.4	2,023.8	1,917.6	6,298.8

Forest Administration

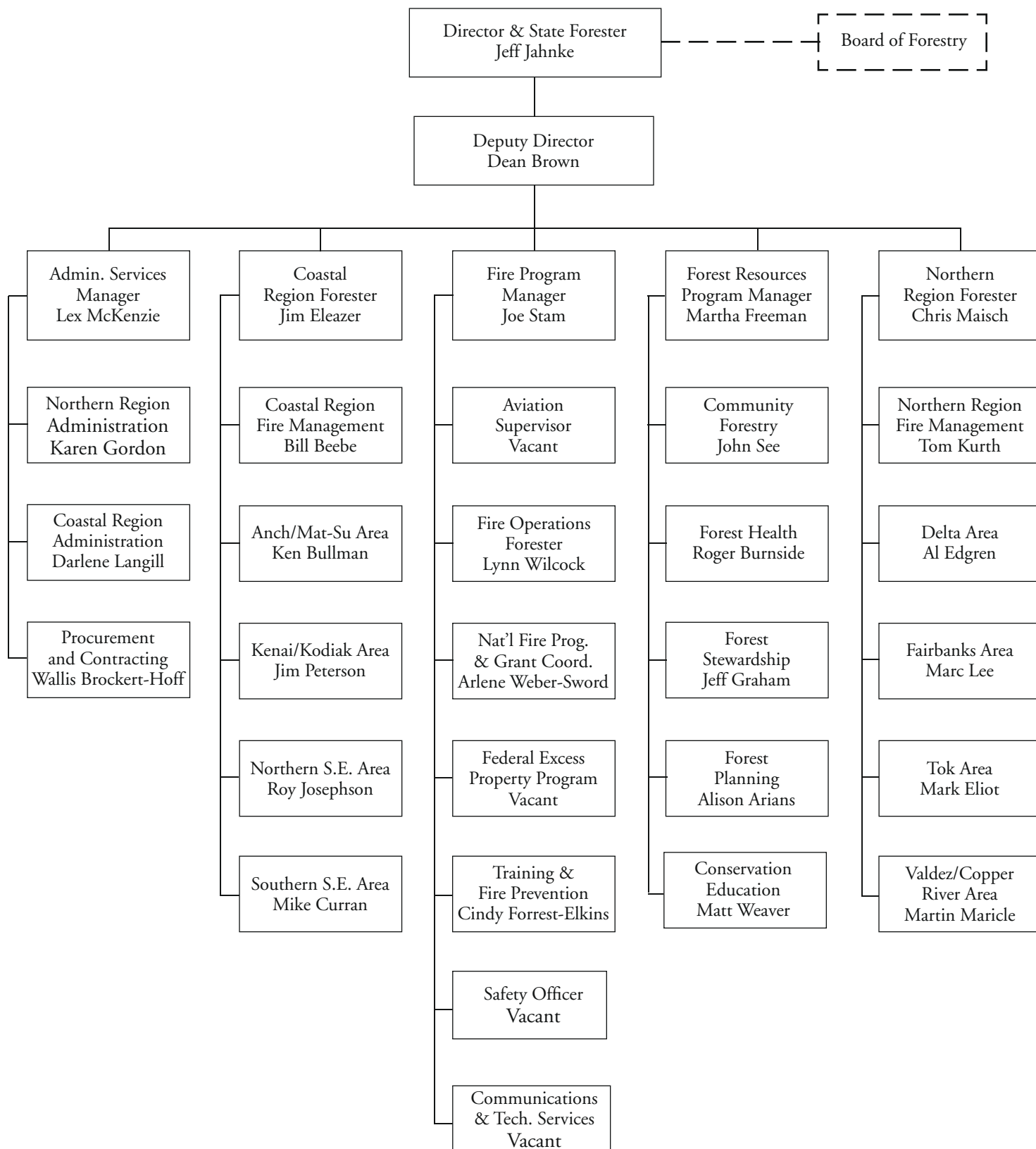
Director's Office	---	---	238.1	238.1
Interagency Receipts	---	---	48.3	48.3
Subtotals	---	---	286.4	286.4
TOTALS	\$3,859.5	\$3,306.9	\$3,060.1	\$10,226.5

Fiscal Year 2004 Budget

Funding Sources	Forest Mgmt. & Development	Fire Preparedness	Fire Suppression	Emerg. Firefighters Non-emergency	Totals
General Funds	2,420.8	10,781.7	7,363.5	—	20,566.0
Federal Funds	1,197.6	377.4	6,960.4	—	8,534.4
Capital Improvement Receipts	293.5	288.0		250.0	831.5
Interagency Receipts	308.7	168.0	—		476.7
Timber Receipts	693.7	—	—		693.7
Other	30.0	—	—		30.0
TOTALS	\$4,944.3	\$11,615.1	\$14,323.9	\$250.0	\$31,133.3
Positions					
Permanent Full-time	42	31	—	—	73
Permanent Part-time/Seasonal	9	179	—	—	188
Non-permanent	12	—	—	—	12
TOTAL POSITIONS	63	210	—	—	273

Forest Management & Development Component				
Renewable Resource Development & Sales	Coastal Region	Northern Region	Statewide	Totals
Board of Forestry	—	—	\$9.1	\$9.1
Forest Practices	363.9	—	55.4	419.3
Forest Management	734.6	1,212.6	246.0	2,193.2
Capital Improvement Receipts	—	—	293.5	293.5
State Designated Program Receipts	—	—	30.0	30.0
Interagency Receipts	—	—	308.7	308.7
Federal Cooperative Forestry Assistance	—	—	1,197.6	1,197.6
Anchorage School District Interns	—	—	42.8	42.8
Subtotals	1,098.5	1,212.6	2,183.1	4,494.2
Forest Administration				
Director's Office	—	—	450.1	450.1
Subtotals	—	—	450.1	450.1
COMPONENT TOTAL	\$1,098.5	\$1,212.6	\$2,633.2	\$4,944.3

Forest Management & Development Component				
Preparedness	\$2,590.4	\$2,176.4	\$6,014.9	\$10,781.7
Interagency Receipts	—	—	168.0	168.0
Capital Improvement Receipts	—	—	288.0	288.0
Federal Cooperative Forestry Assistance	—	—	377.4	377.4
COMPONENT TOTAL	\$2,590.4	\$2,176.4	\$6,848.3	\$11,615.1
Note: Dollar figures are in thousands. For actual number, move decimal three spaces to the right, e.g., 40.5 is 40,500.				



State Forester

State Forester's Office
550 W. Seventh Ave., Suite 1450
Anchorage, Alaska 99501-3566
269-8463 fax: 269-8931

State Forester
Jeff Jahnke, 269-8474

Deputy State Forester
Dean Brown, 269-8476

Admin. Services Manager
Lex McKenzie, 269-8477

Fire Program Manager
Joe Stam, 269-8467

Forest Resources Program Mgr.
Martha Freeman, 269-8473

Forest Planning
Alison Arians, 269-8450

Community Forestry Program
John See, 269-8465

Conservation Education
Matt Weaver, 269-8481

Forest Health & Protection
(Insects and Disease)
Roger Burnside, 269-8460

Forest Stewardship Program
(Landowner Assistance)
101 Airport Road
Palmer, Alaska 99645
Jeff Graham, 761-6309

State Fire Operations
P.O. Box 35005
Ft. Wainwright, AK 99703
356-5850 fax: 356-5220
Logistics: 356-5645
Intelligence: 356-5671
Air attack: 356-1375
Training, Anchorage: 269-8441
Lynn Wilcock, Operations Forester

State Fire Warehouse
3700 Airport Way
Fairbanks, AK 99709-4699
451-2608 fax: 451-2669
Vacant, Fire Support Forester

Aviation Program
101 Airport Rd.
Palmer, Alaska 99645
761-6271
Vacant, Aviation Mgr.

Northern Region

Northern Region Office
3700 Airport Way
Fairbanks, Alaska 99709-4699
451-2660 fax: 451-2690
Chris Maisch, Regional Forester

Fairbanks Area Office
451-2600 fax: 451-2690
Fire line: 451-2626
Fire operations fax: 451-2633
Marc Lee, Area Forester

Northern Fire Management Office
451-2675 fax: 451-2690
Reception: 451-2660
Logistics: 451-2680
Fire management: 451-2675
Aviation mgmt.: 451-2676
Tom Kurth, Fire Mgmt. Officer

Delta Area Office
P.O. Box 1149
Delta Junction, Alaska 99737
(Mi. 267.5 Richardson Hwy.)
895-4225 fax: 895-2125
Al Edgren, Area Forester

Tok Area Office
Box 10 (Mile 123 Glenn Hwy.)
Tok, Alaska 99780
883-5134 fax: 883-5135
Fire line: 883-5657
Mark Eliot, Area Forester

Valdez/Copper River Area Office
P.O. Box 185
Glennallen, Alaska 99588
(Mi. 110 Richardson Hwy.)
822-5534 fax: 822-8600
Martin Maricle, Area Forester

Coastal Region

Coastal Region Office
101 Airport Road
Palmer, Alaska 99645
761-6200 fax: 761-6201
Jim Eleazer, Regional Forester

Mat-Su/Southwest Area Office
761-6300 fax: 761-6311
Fire line: 761-6311
Burn permits: 761-6312
Ken Bullman, Area Forester

Coastal Fire Management Office
761-6238 fax: 761-6227
Reception: 761-6200
Logistics: 761-6218
Aviation mgmt.: 761-6229
Bill Beebe, Fire Mgmt. Officer

Kenai-Kodiak Area Office
42499 Sterling Highway (Mi. 92.5)
Soldotna, Alaska 99669
262-4124 fax: 260-4263
Fire line: 260-3473
Burn permits: 260-4269
Jim Peterson, Area Forester

McGrath Field Office (Seasonal)
Box 130
McGrath, Alaska 99627
524-3011 fax: 524-3932
Fire line: 524-3366
Mike Roos, Fire Mgmt. Officer

Northern Southeast Area Office
P.O. Box 263 (Gateway Building)
Haines, Alaska 99827
766-2120 fax: 766-3225
Roy Josephson, Area Forester

Southern Southeast Area Office
2417 Tongass Ave., suite 213
Ketchikan, Alaska 99801
225-3070 fax: 247-3070
Mike Curran, Area Forester

Alaska State Foresters

Earl Plaurde	October 1959 to June 1968
William Sacheck	July 1968 to June 1974
George Hollett	July 1974 to June 1976
Theodore Smith	July 1976 to April 1982
John Sturgeon	May 1982 to June 1986
George Hollett (acting)	July 1986 to February 1987
John Galea	March 1987 to May 1988
Tom Hawkins (acting)	June 1988 to December 1988
Malcolm “Bob” Dick	January 1989 to November 1992
Dean Brown (acting)	December 1992 to February 1993
Tomas Boutin	March 1993 to January 1997
Dean Brown (acting)	January 1997 to July 1997
Jeff Jahnke	July 1997 to present

